TRI OIL 78-28 STATE 803
SE SE 28-5N-3W MARICOPA CO.

COUNTY Maricopa AREA 5.5 mi. SW Wittman LEASE NO. State 38131

WELL NAME TRI OIL 78-28 STATE

LOCATION SE SE SEC 28 TWP 5N RANGE 3W FOOTAGE 330 fsl, 990 fel

ELEV 1613 GR 1623 KB SPUD DATE 4-[redacted]-82 STATUS P+A 12-6-82 COMP. DATE 12/82 TOTAL DEPTH 4520

CONTRACTOR Lee Gibson Oil Co., 20511 S/ Blythe, Riverdale, CA 93656

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH

DRILLED BY ROTARY

DRILLED BY CABLE TOOL

PRODUCTIVE RESERVOIR

INITIAL PRODUCTION

FORMATION TOPS	DEPTHS	SOURCE L.L.	SOURCE E.L.	REMARKS

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS
Dual Ind - SFL Borehole Comp. Sonic Comp. Neutron Lm Density Computer Processed		

SAMPLE LOG

SAMPLE DESCRP.

SAMPLE NO. 1841

CORE ANALYSIS

DSTs

REMARKS

APP. TO PLUG

PLUGGING REP.

COMP. REPORT

WATER WELL ACCEPTED BY

BOND CO. Travelers Indemnity Co. BOND NO. 402F9798

BOND AMT. $ 5,000 CANCELLED 03/02/89 DATE 12-8-82 ORGANIZATION REPORT x

FILING RECEIPT 2243 LOC. PLAT x WELL BOOK x PLAT BOOK x

API NO. 02-013-20022 DATE ISSUED 4-9-82 DEDICATION E/2 SE/4

PERMIT NUMBER 803

(over)

P/A 803

RECEIVED
OCT 10 1984
O & G CONS. COMM.

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well [✓] Work-Over [ ] Deepen [ ] Plug Back [ ] Same Reservoir [ ] Different Reservoir [ ] Oil [ ] Gas [ ] Dry [✓]

DESCRIPTION OF WELL AND LEASE

Operator: Tri Oil Co.	Address: 20,511 S. Blythe Riverdale, Calif. 93656
Federal, State or Indian Lease Number or name of lessor if free lease: State 13-38131	Well Number: State 78-28
	Field & Reservoir: Happy Valley
Location: 990' W. and 330' N. of S.E. section corner-Maricopa	County: (16)
Sec. TWP-Range or Block & Survey: 28, T.5 N., R.3W. G.&S.R. Base and Meridian	

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (DF, RKB, RT or Gr.)	Elevation of casing hd. flange
4/30/82	7/1/82	8/6/82	1639 feet	ground 1630 feet

Total depth	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.
4536'			

Producing interval (s) for this completion	Rotary tools used (interval)	Cable tools used (interval)
2024-2343 and 3935-4514	✓	

Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
no	no		

Type of electrical or other logs run (check logs filed with the commission) — Date filed

Dual induction-S.F.L., Sonic, Neutron Diameter, Cyberlook and Cemend Bond logs

CASING RECORD

Casing (report all strings set in well — conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Conductor	24"	16"		40'	70	
Surface	15"	10 3/4"	40	383	248	none
Oil string	9 5/8"	7"	23	4517'	1000	none

TUBING RECORD			LINER RECORD				
Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft)

PERFORATION RECORD			ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD	
Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval
See Well History				

INITIAL PRODUCTION

Date of first production	Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)
none	

Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity *API (Corr)

Tubing pressure	Casing pressure	Cal'td rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas—oil ratio

Disposition of gas (state whether vented, used for fuel or sold):
none produced

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the operator of the _____ (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date: 10/3/84

Signature: Lee W. Gibson

Permit No.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Well Completion or Recompletion Report and Well Log
File One Copy
Form No. 4

DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION*
Pleistocene *	0	1225	Fresh water sands and shale
Pliocene *	1225	2017	Shale and silt
"	2017	2040	Fresh water sandstone, coarse
"	2040	2286	Black lava beds, permeable and bearing fresh water
"	2286	2383	Fresh water sandstone, coarse
Miocene *	2383	2793	Salt water sandstone, medium grained and shaly
"	2793	3090	Shale and sandstone lenses, salt water bearing
"	3090	3440	Volcanics
Cretaceous *	3440	3894	Sandstone, likely bearing fresh or brackish water
"	3894	3940	Fault gouge
"	3940	4536	Actinolite schist of sedimentary origin

* To be taken only as geological "guesstimates" of the signator, based on his non-thorough knowledge of local geology. The formation ages are not based on microfaleontology or any other reliable means of age dating.

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion rep[illegible]and well log shall be filed with the State of Arizona O[illegible] Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

TRI-OIL ABANDONMENT (803)

12-3-82 Departed office @ 2:00 pm
Cem. arrived @ 4:15 pm + d.p. hanging @ 4215'. pumped ± 5 yards of cem. while displacing cem. w/ water pump hose split. Replaced hose but it took too long + at this point I was afraid the cem. would start setting up — pulled 3 stds but this took what appeared to long (ea. std = 60') — from the 5th std on he was pulling cem-wet d.p. + it was very time-consuming (when they pulled one std they had to pound on it to empty the cem.) — it was clear on about the 23rd std that the cem had set up as it sounded more solid when they pounded on pipe. — at ± 8:30 pm they gave up trying to empty the cem ft. the pipe + started laying dn singles (all full of cem)
Got home @ 10:30 pm

12-4-82 With d.p. hanging @ 2490', pumped 147 cubic feet of cem., calc. to fill to 1830' (about 180' above the top of the perfs)

12-6-82 Poured 10 sx cem + 2 sx sand 60'-Surf.

12-14-82 Surf insp. — incomplete dozer was stuck — if they can't level off area with so much wet mud, they will berm around wet mud + wait until it dries. If they do this, fencing will be required. Lee concurred

± 500 mkes
12/15/82

Tri Oil Co. well No. 78-28 State (803)
Departed from my residence at 9:00 p.m.
on May 10, 1982. Arrived at well location in
the Wildman area at 10:30 p.m.

The drilling contractor was in the process of
running two joints (20 feet ±) of 9 5/8" csg.
This was to be the last of the 9 5/8" csg
before running 11 3/4" csg to make a total
of 450' of pipe. The 9 5/8" csg, however,
froze at 383' and they were unable to finish
the csg setting operation as proposed.

After considerable effort it was decided to settle
for the 383' of csg & try to establish circulation.
Having established circulation, the 9 5/8" csg
was cemented at 383' with approx. 170
sacks of cement & excellent returns at the
surface were achieved.

Departed well site at 11:00 a.m on May 11.
& arrived at office at 12:00 pm

5-11-82
R.A.Y.

TRI OIL COMPANY
STATE 78-28
Maricopa County, Arizona

WELL HISTORY

1982

4/13 24" hole to 40'.
16" conductor cement @ 40'.
Rat hole to 26'.

4/30 Spudded in.

5/10 Drilled 15" hole to 460.
10-3/4", 40-lb. surface casing stuck @ 383'.
Request to cement casing at that depth was accepted by the State, and so it was cemented with 297 cu. ft. of cement.

5/13 Rigged up and installed B.O.P.

5/15 Drilled out of shoe.

7/1 Finished drilling 9-7/8" hole to 4536' T.D. Ran electric log but no cores.

7/4 Ran 7", 23-lb., J55 casing to 4517' and cemented with 1200 cu. ft. of cement slurry. Had substantial surface return of cement from annulus.

7/6 Drilled out set cement from 4457' to 4513'.

7/22 Shot 4-3/8" holes @ 2020-21'.
Test failed because of loose joint.

7/23 Shot 4-3/8" holes @ 2337-38'. On one-hour test, recovered 7 stands of salt water (hole fluid) from another loose joint. Parted company with testing company.

7/27 Shot 4-3/8" holes @ 4216-17'. 41-minute test recovered 3800' of fresh water. Final flow pressure was 1597 psi.

7/30 Bullet perforated 7" casing as follows:

11	3/8" holes	@ 2024-44
2	" "	@ 2129-30
4	" "	@ 2157-60
25	" "	@ 2290-2343
4	" "	@ 3919-21
16	" "	@ 3935-50
11	" "	@ 3965-75

WELL HISTORY (cont.)

7/30 (cont.)	4 - 3/8"	holes @ 3982-85
	3 - "	" @ 3999-4001
	3 - "	" @ 4015-17
	4 - "	" @ 4045-48
	3 - "	" @ 4084-86
	5 - "	" @ 4996-4100
	6 - "	" @ 4139-44
	20 - "	" @ 4206-25
	9 - "	" @ 4248-56
	35 - "	" @ 4308-42
	10 - "	" @ 4384-93
	5 - "	" @ 4425-29
	13 - "	" @ 4440-52
	10 - "	" @ 4462-71
	14 - "	" @ 4489-4502
	4 - "	" @ 4512-14

7/31 Using diverter balls, hung tubing @ 1700' and sand fraced entire interval with 52 tons of 10-20 and 20-40 frac sand.

8/1 Ran tubing to 2023' and equalized 10 sacks of cement out bottom of tubing. Pulled tubing to 2012' and circulated out excess cement

Waited 6 hours and found cement at 2020'. Equalized a second batch of 30 sacks of cement at 2020'. Pulled up 6 stands and squeeze cemented to 1970 psi.

Waited 4 hours. Drilled out to 2021'. Pressure test to 700 psi held o.k.

8/6 Ran production string and cleaned out to 2067'. Hung tubing @ 2036' for swab test of perforations @ 2020-42'

8/7 Swabbed from afternoon of the 6th until noon. Returns went from hole fluid of salt water to fresh water with slight show of gas and light gravity oil. Reverse circulated muddy froth with strong trace of very light gravity, amber colored oil.

8/10 & 11 - Hung tubing @ 2005' and swabbed. Had returns of salt water (hole fluid) for 12 hours, then fresh water for 34 hours with fluid level holding at 830'.

Felt for bottom and found sand bridge plug had fallen to 4009'. Reverse circulated and found fluid below about 2350' was very fresh - same as the returns at end of the previous swabbing. Therefore, the fluid entry likely was coming at least in part, if not entirely, from the perforations at 3982' to 4001'.

8/12 Equalized viscous mud slug @ 2340-86'.
Hung tubing @ 2355' and equalized 175 sacks of cement out bottom of tubing.

8/14 Drilled set cement from 1705' to 2074'.

8/15 Hung tubing @ 2014'. Pressure tested to 1600 psi o.k. Drilled out to 2166'. Landed tubing at 2161'.

8/18 Pressure test at 1550 psi held o.k.

8/20 Drilled and cleaned out to 4150'. Lost circulation with salt water at 4000' for 30 minutes with 6" x 12" mud pump running full speed.

8/20-25 Swabbed approximately 500 barrels of fresh water from 3935' - 4150' with very light film of high gravity oil, amber colored.

8/30 Hung tubing @ 4144' and reverse circulated clean. Mixed 26 sacks of cement and equalized inside and outside of bottom of tubing. Pulled just above and pressure tested to 1500 psi. Drilled out and repeated above with 26 sacks of cement.

8/31 Found top of set cement @ 3849'. Pressure tested casing to 1500 psi and found it would bleed to zero in 15 minutes. Therefore, the upper level had broken open partially.

9/3 Hung tubing at 2900'. Swabbed approximately 900 barrels of fresh water with no gas and only minute oil fluorescence.

9/5 Cleaned out to 4514'.

9/6 Set tubing packer @ 4275-80'. Swabbed 400 bbls./day for three full days. Returns were fresh water with no gas and only a very small trace of light gravity oil. Suspended testing operations.

PLUGGING OPERATIONS:

12/3 Ran tubing to 4511' and pumped out bottom 140 sacks of cement. Pulled 800 feet and circulated hole full of mud.

12/4 Hung tubing @ 2490'. Equalized 147 cubic feet of cement out bottom of tubing. Pulled 12 stands and squeezed to 1300 psi.

12/5 Pushed wadded paper sack plug to 59' and dumped in 10 gallons of cement slurry.

12/6 Hung tubing @ 55' and circulated cement to surface. Cut off well head 4 feet below surface. Welded on 3/8" steel plate and brought 4-1/2' marker pipe to 4 feet above ground with welded identification plate.

Tri Oil Co. 78-28 State 4-9-82 803

SE SE 28-1N-3W Maricopa Co. 330' FSL, 990' FEL

Elev. 1613 GL
Spud date:

Proposed depth: 4500-6200

Spudded 4-12-82 Set 40' conductor pipe 13 5/8"(?)
6-16- Ø 3950'
6-22 Ø 4115'
6-24 Ø 4197' gas kicks up from 2-3 to 17units
6-29 Ø 4390' 8/12 swbg.-Drill out to lower perfs.
7/1 TD 4536 9/9 Verbal OK to T.A.
7/2 E logs
7/4 Running 7" csg.
7/19 Laying down drill pipe

API # 02-013-20022

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒ RE-ENTER OLD WELL ☐

Tri Oil Company
NAME OF COMPANY OR OPERATOR

20511 S.Blythe Ave. | Riverdale | Calif. 93656
Address | City | State

Lee Gibson Oil Company
Drilling Contractor

20511 S. Blythe. | Riverdale | Calif. 93656
Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor	Well number	Elevation (ground)
State 38131	78-28	1613

Nearest distance from proposed location to property or lease line:	Distance from proposed location to nearest drilling, completed or applied–for well on the same lease:
330' to south section line feet	no other well feet
Number of acres in lease:	**Number of wells on lease, including this well, completed in or drilling to this reservoir:**
640 acres	none

If lease, purchased with one or more wells drilled, from whom purchased: Name Address

Well location (give footage from section lines)	Section–township–range or block and survey	Dedication (Comply with Rule 105)
990' W & 330' N of SE Cor.	Sec 28, T5N, R3W, G&SRB&M	E½SE¼ Sec.28

Field and reservoir (if wildcat, so state)	County
wildcat	Maricopa, Arizona

Distance in miles and direction from nearest town or post office: 5.5 miles southwest from Wittman post office

Proposed depth:	Rotary or cable tools	Approx. date work will start
4,500 feet	Rotary	April 7, 1982
Bond Status Enclosed	Organization Report	Filing Fee of $25.00
Amount $5,500	On file Or attached	Attached

Remarks: We doubt that we shall want to drill below 4500 ft. but want to be permitted to drill as deep as 6200 feet should drilling results change our minds.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the owner of the Lee Gibson Oil Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Lee M. Gibson
Signature

March 31, 1982
Date

Permit Number: 803
Approval Date: 4-8-82
Approved By: R. A. Ytsma

Notice: Before sending in this form be sure that you have given all informationa requested. Much unnecessary correspondence will thus be avoided.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Drill or Re-enter
File Two Copies

Form No. 3

(Complete Reverse Side)

1. Operator shall outline the dedicated acreage for *both* oil and gas wells on the plat.

2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.

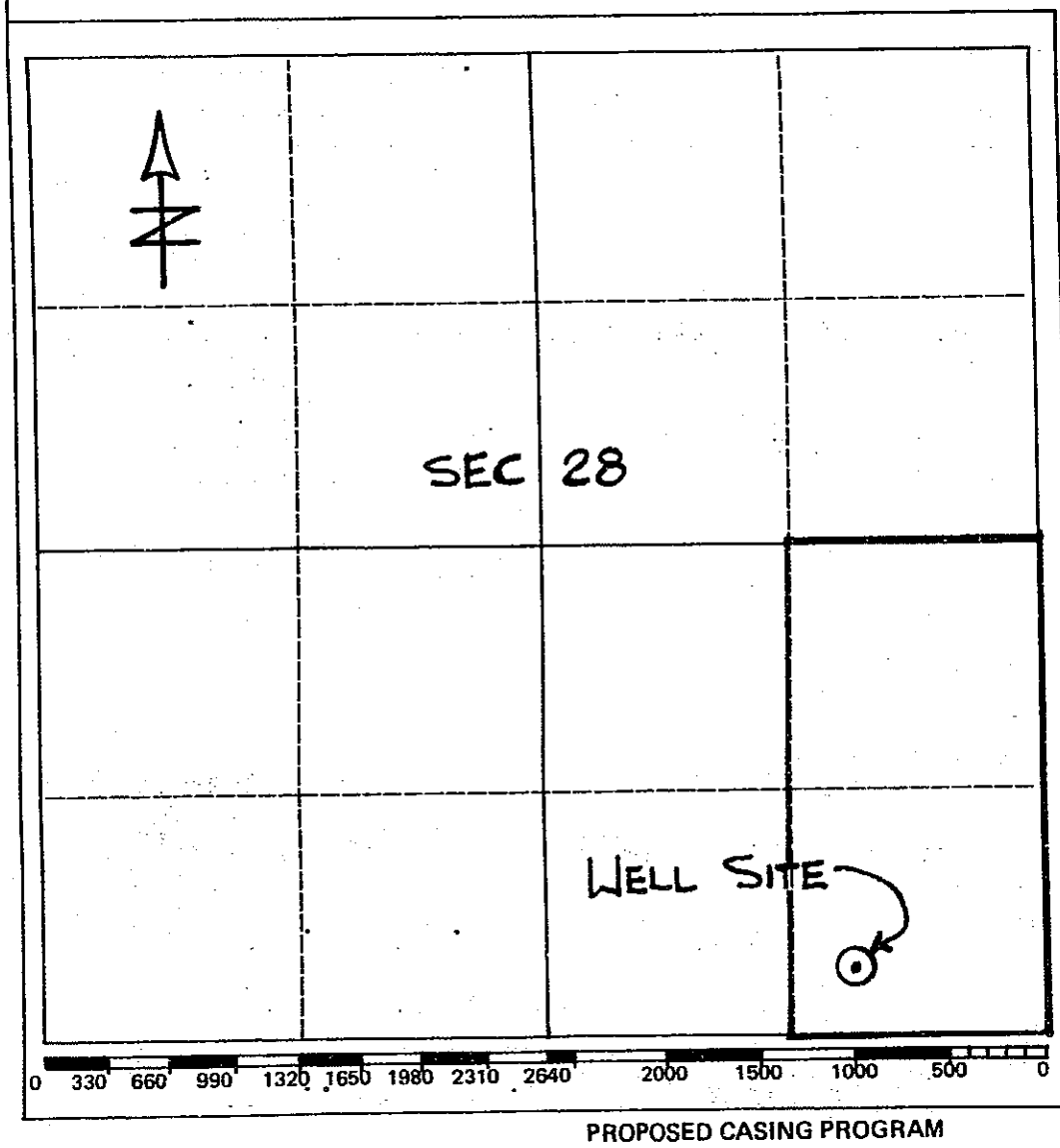
3. ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO_____.

5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES_____ NO_____. If answer is "yes," Type of Consolidation _____

6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description



CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name: Lee W. Gibson

Position: Operator

Company: Tri Oil Company

Date: March 31, 1982

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Registered Professional Engineer (Certificate No. 12058) State of Arizona

Richard L. Harding

Date Surveyed: March 20, 1982

Registered Professional Engineer and/or Land Surveyor

Richard L. Harding

Certificate No. 12058

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
10 3/4"	40	H-40	0	550	550	300	Portland

PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: TRI OIL COMPANY
(OPERATOR)

to drill a well to be known as
78-28 STATE
(WELL NAME)

located 330' FROM SOUTH LINE & 990' FROM EAST LINE (SE SE)

Section 28 Township 5 NORTH Range 3 WEST, MARICOPA County, Arizona.

The N/2 of SE/4 of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 9th day of April, 1982.

OIL AND GAS CONSERVATION COMMISSION

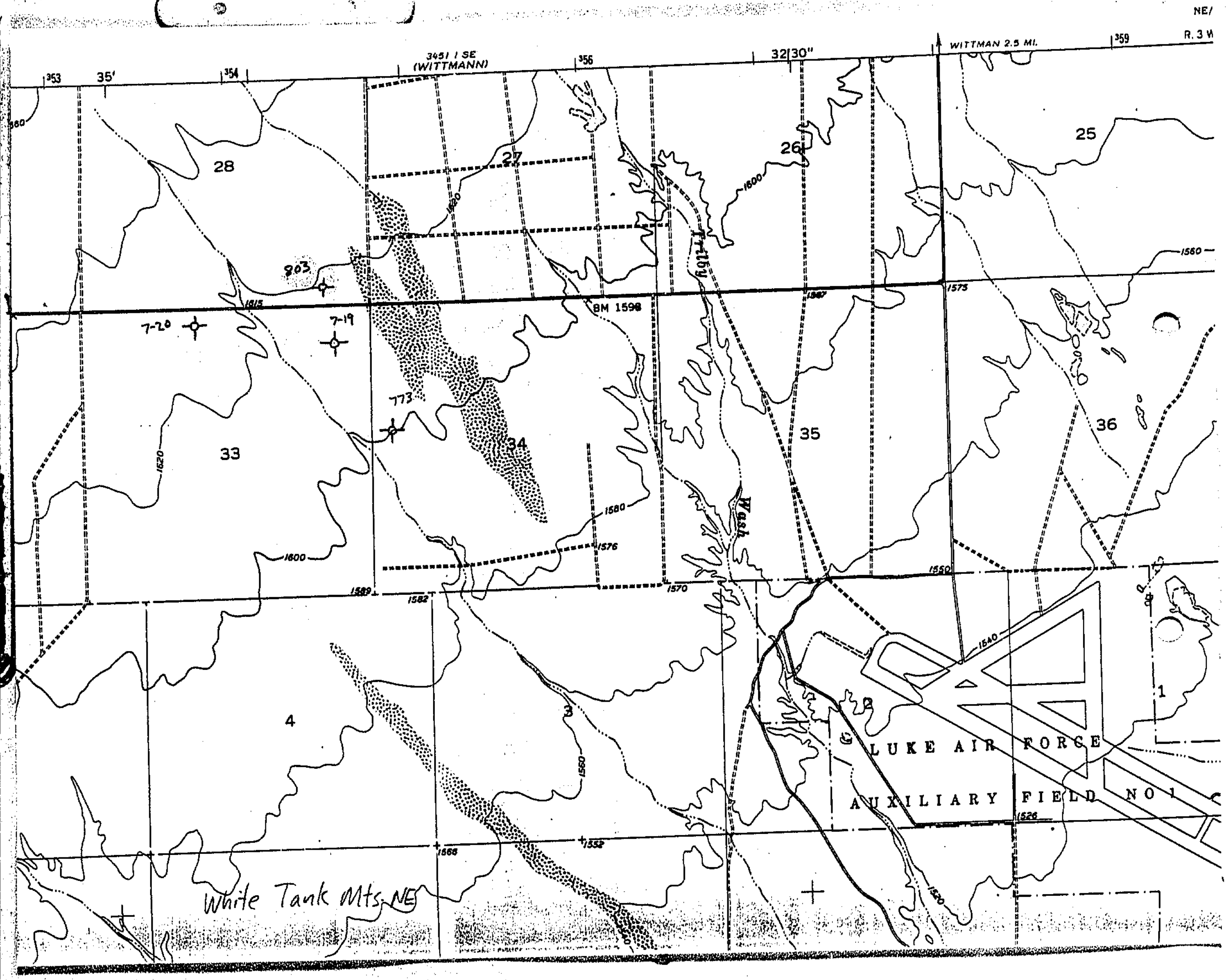
By R. C. Lyons
EXECUTIVE SECRETARY

PERMIT Nº 803

RECEIPT NO. 2243
API NO. 02-013-20022

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill
FORM NO. 27

TEN FOOT SAMPLES ARE REQUIRED FROM SURFACE



NE/
R. 3 W
WITTMAN 2.5 MI.
359
32|30"
356
3451 I SE
(WITTMANN)
354
35'
353
25
26
27
28
36
35
34
33
1
2
3
4
Trilby
Wash
BM 1598
LUKE AIR FORCE
AUXILIARY FIELD NO 1
803
7-19
7-20
773
White Tank Mts NE

T.5N., R.3W., G.&S.R. B.&M.

SEC 28

ALTERNATE 80-ACRE DRILLING PARCEL

FIRST CHOICE 80-ACRE DRILLING PARCEL

WELL LOCATION

1320'

990'

330'

1650'

2640'

PATTON AVE.

SEC 33

FOUND ORIGINAL 1½" GLO PIPE B.C. GONE

FOUND GLO BRASS CAP

FOUND 2" PIPE NOT ORIGINAL

250'

70'

SUMP

33'

33'

82'

132'

50'

175'

990'

20'

330'

PATTON AVE.

SET P.K. NAIL

SET P.K. NAIL

20'

330'

SUMP

33'

33'

82'

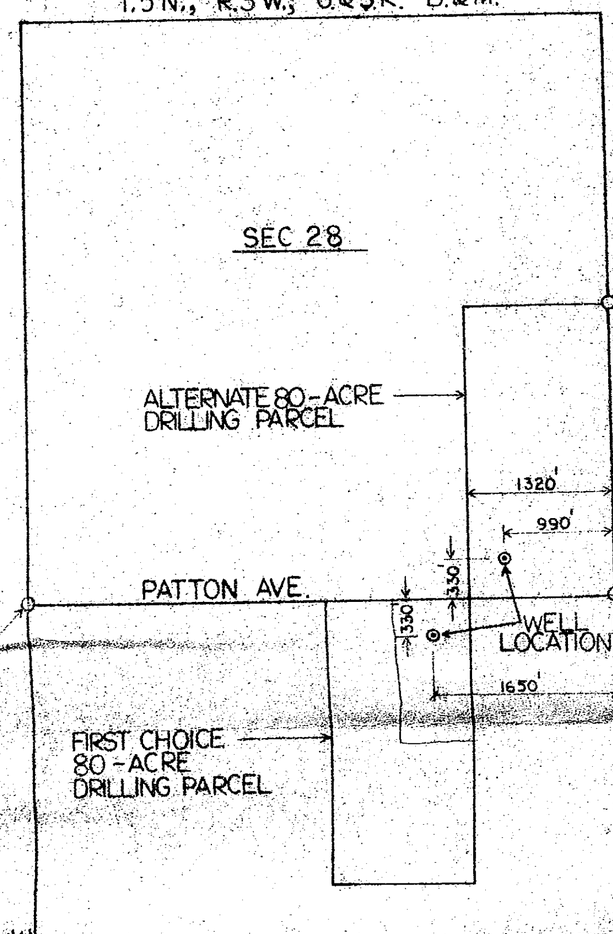
50'

8' DEEP

ENGINEER'S CERTIFICATE

I, RICHARD L. HARDING, HEREBY CERTIF
REGISTERED CIVIL ENGINEER IN THE STA
THIS MAP, CONSISTING OF 1 SHEET, COR
SURVEY MADE UNDER MY SUPERVISION DUR
1982, THAT THE SURVEY IS TRUE AND C
ALL THE MONUMENTS SHOWN ACTUALLY EXI
SHOWN; THAT THEIR POSITIONS ARE CORR
SAID MONUMENTS ARE SUFFICIENT TO ENA
TRACED. Richard L. Harding

T.5N., R.3W., G&SR. B&M.



ENGINEER'S CERTIFICATE

I, RICHARD L. HARDING, HEREBY CERTIFY THAT I AM A REGISTERED CIVIL ENGINEER IN THE STATE OF ARIZONA; THAT THIS MAP, CONSISTING OF 1 SHEET, CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION DURING THE MONTH OF MARCH, 1982, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT ALL THE MONUMENTS SHOWN ACTUALLY EXIST OR WILL SET AS SHOWN; THAT THEIR POSITIONS ARE CORRECTLY SHOWN AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE TRACED. Richard L. Harding 3/24/82

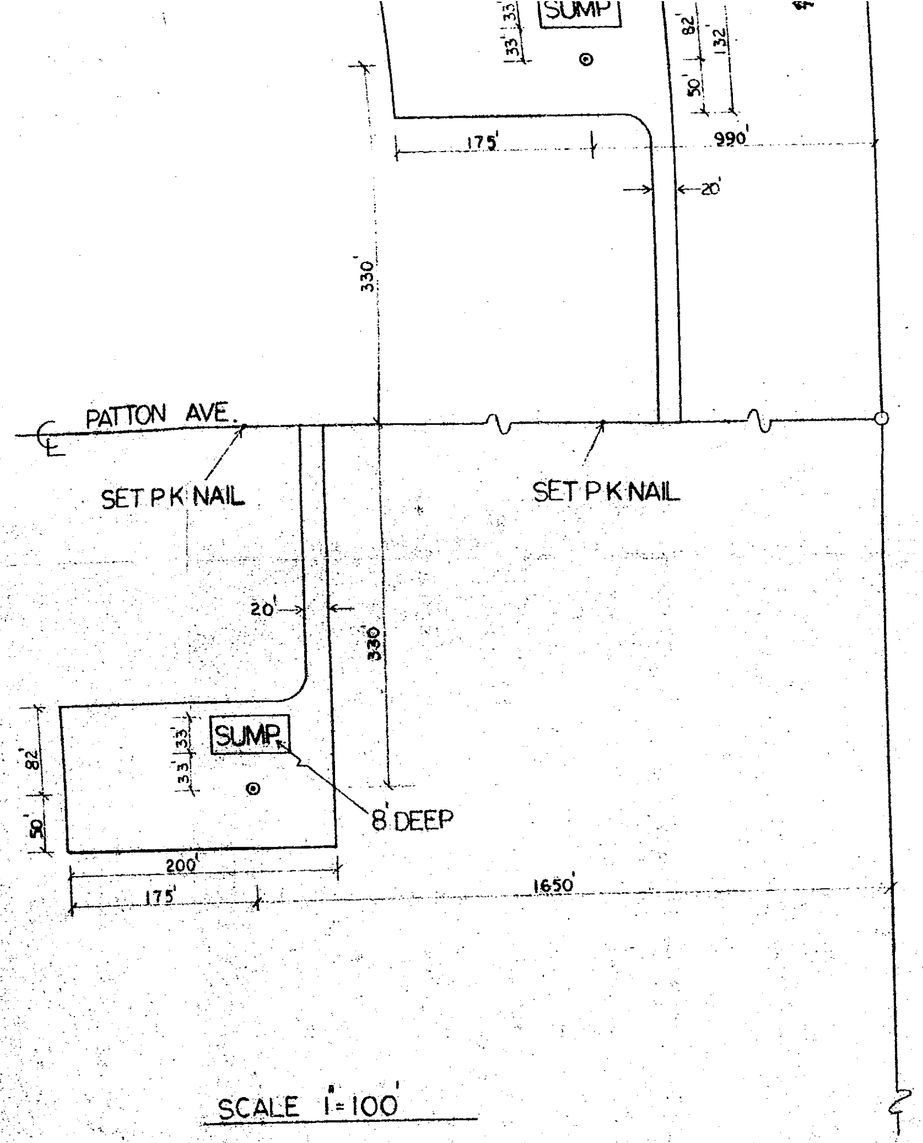
CHECK BY RLH

PROJECT TITLE TRI OIL COMPANY

DRAWN BY CDS | SHEET TITLE WELL LOCATION

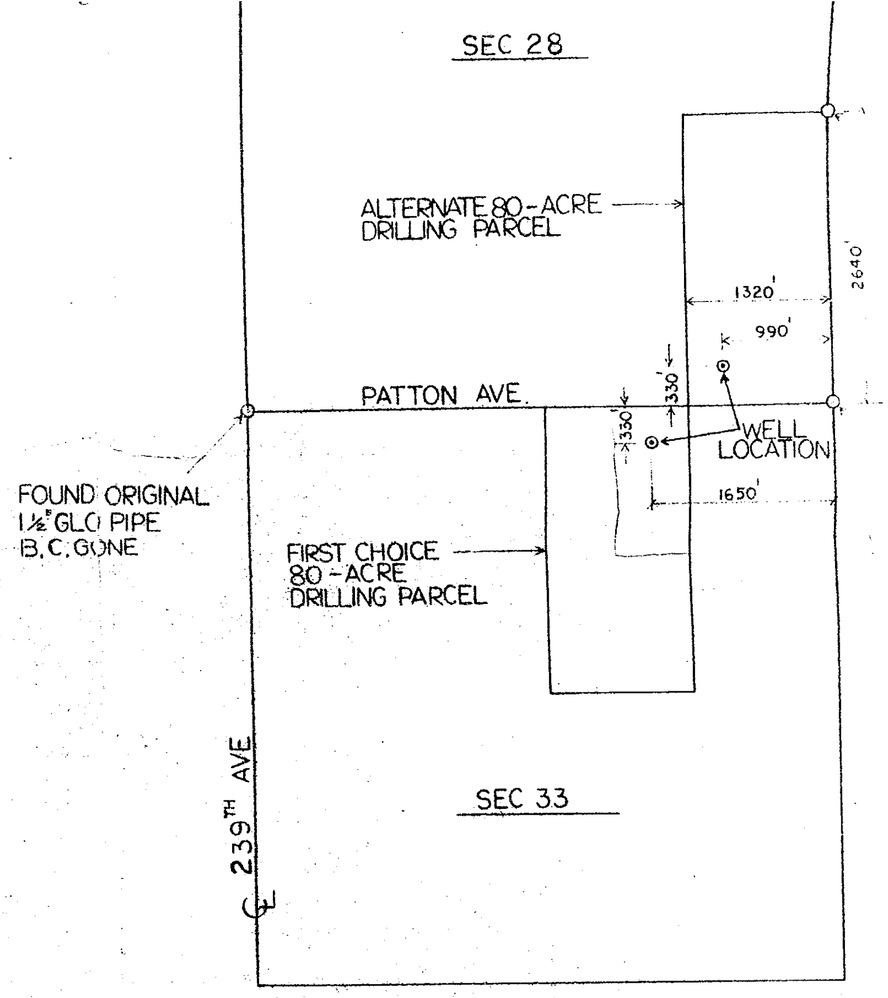
HARDING, P.E. OF PROFESSIONALS, INC.
SA, ARIZONA 85202
-897-0695
LAND PLANNING
SURVEYING

78-28 STATE
SE 28-5N-3W MARICOPA C



SCALE 1"=100'

NOTE: ½" MONUMENT SET AT FOUR CORNER OF SUMPS AND WELL LOCATIONS



SCALE 1"=1,000'

ALL THE MONUMENTS SHOWN ACTUALLY EXIST AS SHOWN; THAT THEIR POSITIONS ARE CORRECTLY SHOWN; AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE TRACED. Richard C. Hall

FOUND GLO BRASS CAP

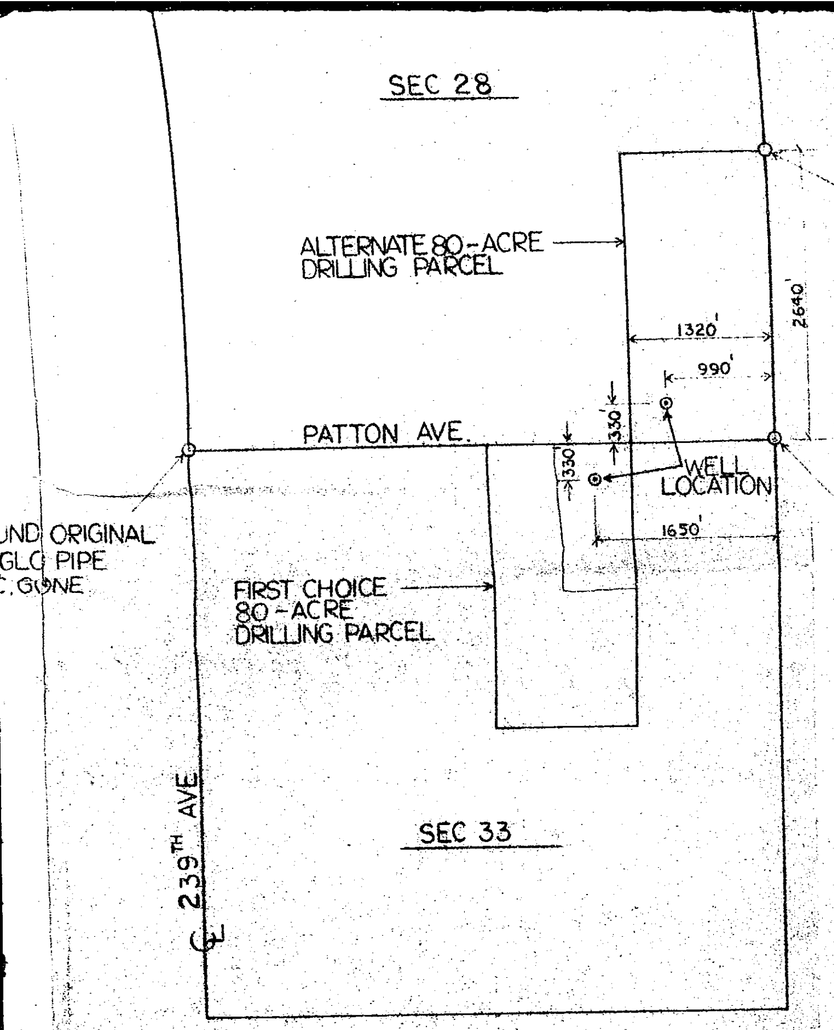
FOUND 2" PIPE NOT ORIGINAL

LENGEND

o — MONUMENT FOUND

• — MONUMENT SET

SURVEY MADE UNDER MY SUPERVISION DURING THE MONTH OF MARCH, 1982 . THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT ALL THE MONUMENTS SHOWN ACTUALLY EXIST OR WILL SET AS SHOWN; THAT THEIR POSITIONS ARE CORRECTLY SHOWN AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE TRACED. Richard L. Harding 3/29/82



SCALE 1"=1000'

PROJECT TITLE: TRI OIL COMPANY

SHEET TITLE: WELL LOCATION

DRAWN BY: CDS

RICHARD L. HARDING, P.E.

ARIZONA CONSULTING PROFESSIONALS, INC.
2655 W. GUADALUPE RD. MESA, ARIZONA 85202
PHONE: 602-897-0695

CIVIL ENGINEERING
STRUCTURAL ENGINEERING
LAND PLANNING
SURVEYING

REVISIONS:
SYM. BY DATE

SHEET NO. 1/1

JOB # 20305

78-2S STATE
SE 28-5N-3W MARICOPA C

State of Arizona
Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500

Fife Symington
Governor

Larry D. Fellows
Director and State Geologist

September 19, 1995

file 803

Mr. Joe Kruger
Kansas Geological Survey
1930 Constant Avenue
University of Kansas
Lawrence, Kansas 66047-3726

Dear Joe:

The information on the wells in the Wittmann area we talked about yesterday is enclosed. This information includes brief drillers logs on the Robertson wells 1 and 2; completion report, dual induction-SFL, borehole compensated sonic, and compensated neutron--formation density logs on the Tri Oil Company well; and dual induction guard and mud logs on the Salt River Basin Joint Venture well.

Even though this information is sketchy, especially for the Robertson wells, it represents the best available data we have in our files. I tried to make sense of the interest in this particular area in my 1991 study of these wells. That study is in the July 22, 1991, issue of *Oil & Gas Journal*.

I look forward to the results of your study.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

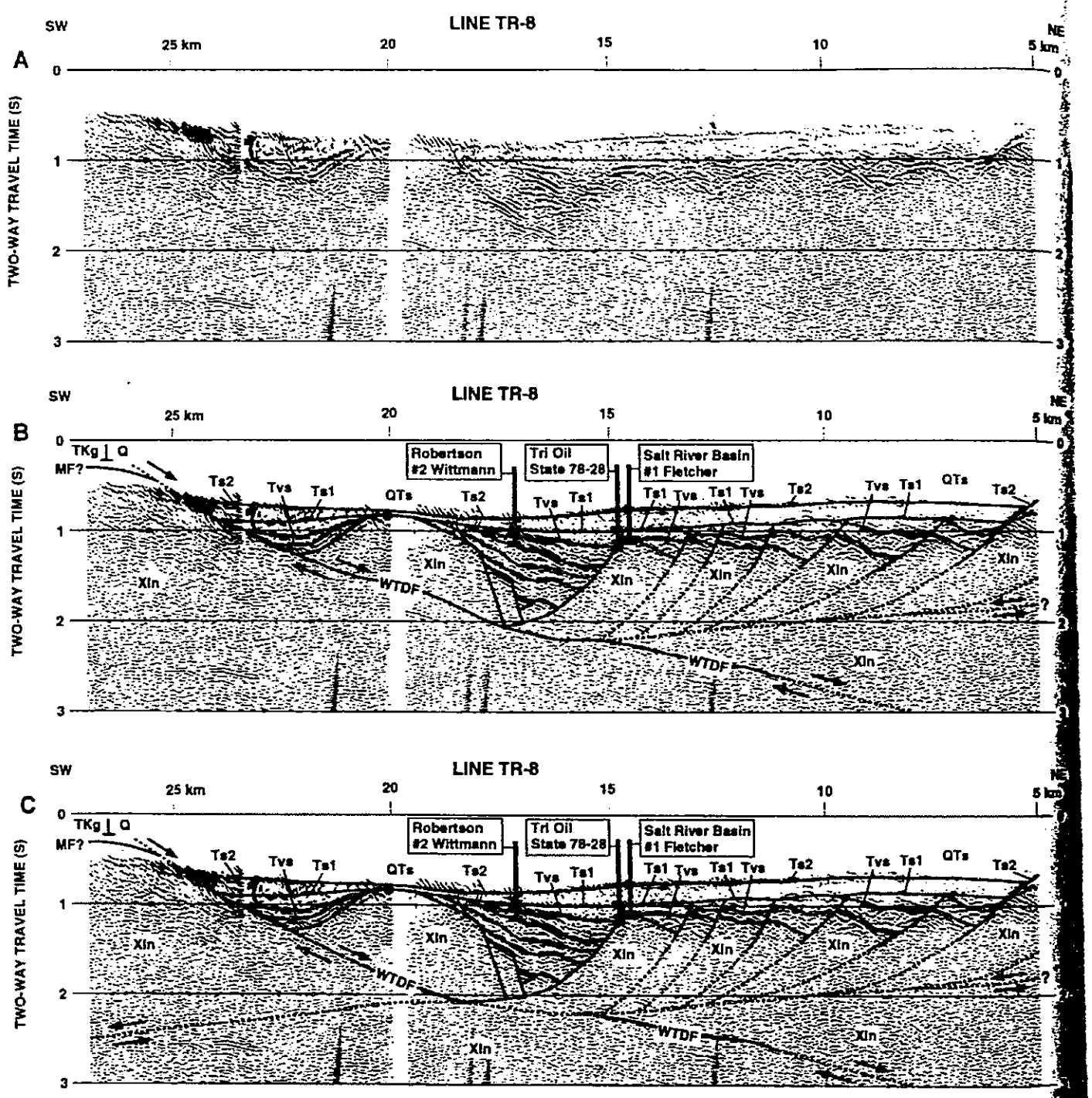
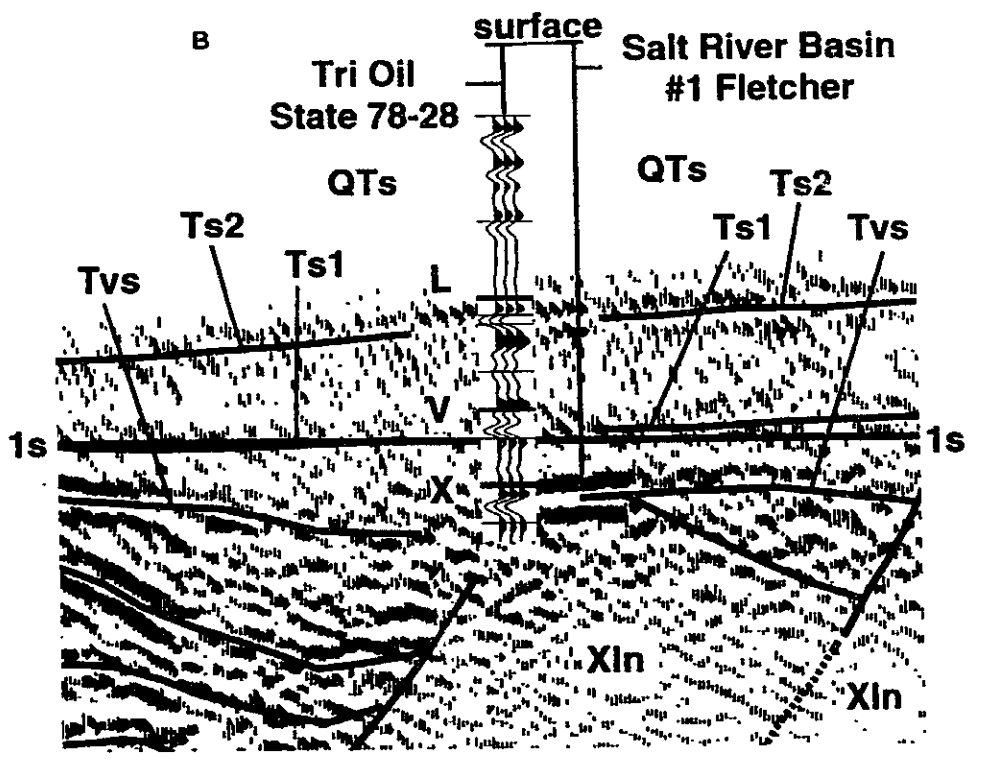


Figure 5. Stacked seismic section of line TR-8. A: Uninterpreted. B: Preferred interpretation. C: Alternate interpretation. Horizontal scale is in kilometers from the beginning of the line. These kilometer markers are used for lateral referencing in the text. Vertical scale is in seconds of two-way traveltime. There is no vertical exaggeration at a velocity of ~4 km/s. Horizontally exaggerated at higher velocities, vertically exaggerated at lower velocities. Solid interpretation lines represent horizons or faults. Dashed lines represent possible fault locations. Arrows indicate relative offset along the White Tank detachment fault and southwest-dipping low-angle normal fault. Projected well locations indicated by thick vertical lines. Top of line is near ground level; bottom of well is indicated by horizontal dash. Other horizontal dashes represent key horizons described in text and Table 3. Abbreviations are as follows: WTDF, White Tank detachment fault; MF, mylonitic front; Q, Quaternary alluvium; QTs, younger Quaternary and Tertiary sediments (basin fill); Ts2, top of unit interpreted to contain mostly undeformed late to middle Tertiary sedimentary rocks and some lava flows; Ts1, top of unit interpreted to contain mostly tilted to slightly tilted mid-Tertiary sedimentary rocks and some volcanic rocks (probably an angular unconformity in many places); Tvs, top of one or more units interpreted to contain mostly tilted mid-Tertiary volcanic and volcaniclastic rocks interlayered with other sedimentary rocks (probably an angular unconformity in many places); TKg, middle Tertiary or Late Cretaceous granite and granodiorite; Xln, crystalline basement. Contact between TKg and Q as determined by detailed geologic mapping (Reynolds, 1988; Reynolds and Grubensky, 1993) is indicated near the top of the section by a vertical line with a short dash near ground level. See Tables 1 and 2 for acquisition and processing parameters.



ary of reflectivity imaged on line PW-21 (Figs. 7 and 8). Basement reflectivity beneath the mylonitic front is present on line TR-8 (Fig. 4), but is more diffuse and less obvious than on line PW-21 (Figs. 7 and 8). This may be due to more noise on line TR-8, differences in acquisition parameters such as the seismic source (Table 1), or less continuity of reflectors in the dip direction. Higher amplitude, more continuous reflections, such as those near 5 s between 40 and 46 km and near 2.5 s between 23 and 24 km along line TR-8, probably represent subhorizontal intrusions. The intersection of the mylonitic front with the White Tank detachment fault north of crystalline outcrops in the White Tank core complex (Fig. 4) is inferred on the basis of basement reflectivity directly beneath the detachment fault and relations observed in other core complexes (e.g., Davis et al., 1980; Frost and Okaya, 1986; Hauser et al., 1987; Davis and Lister, 1988; Flueh and Okaya, 1989; Reynolds and Lister, 1990; Livaccari et al., 1995).

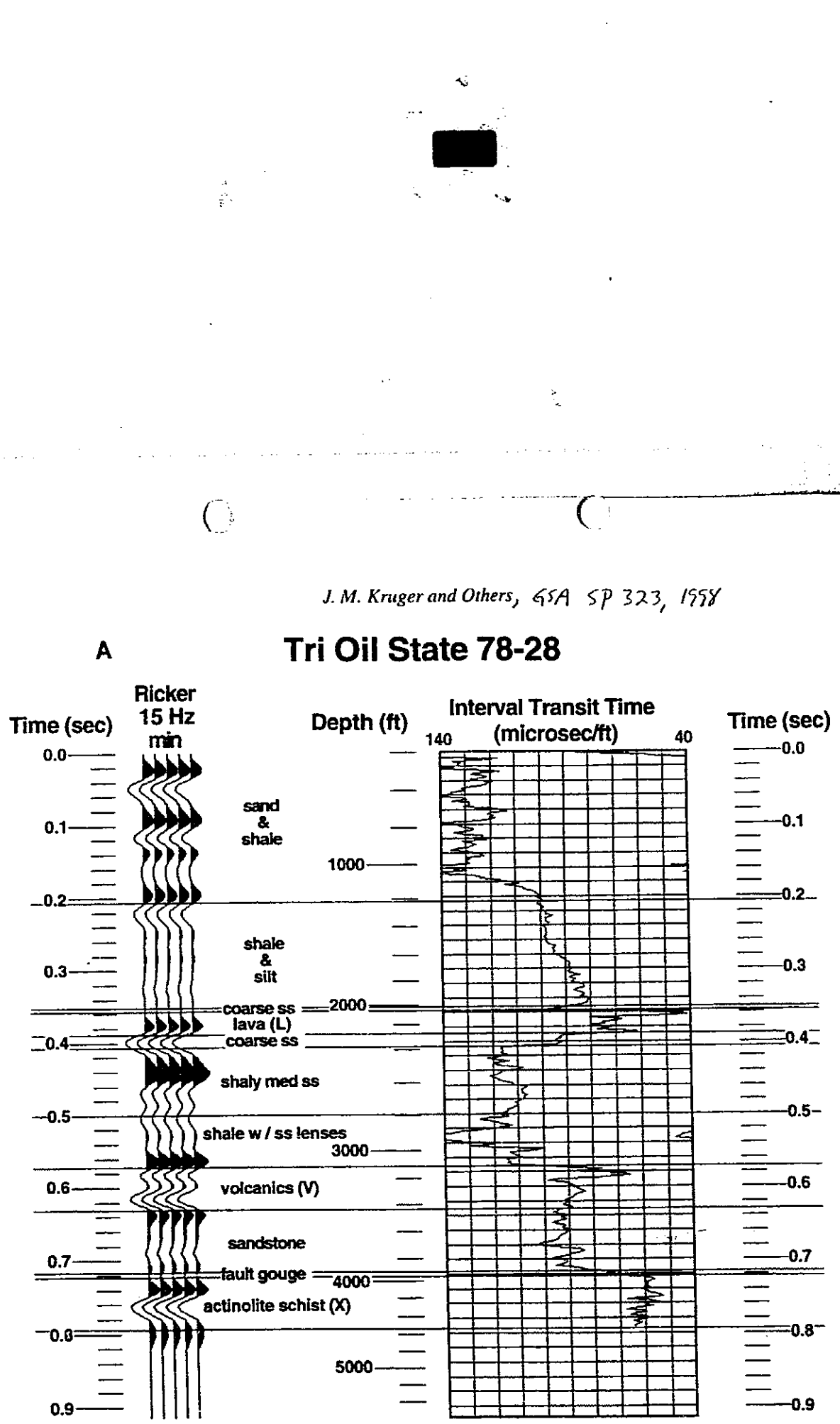


Figure 6 (on this and facing page). Synthetic seismogram generated from the Tri Oil well and its correlation with line TR-8. A: Synthetic seismogram and sonic log, with correlations and lithologies from driller's log. Linear scale is two-way traveltime from top of sonic log, with nonlinear depth scale from top of well (Kelly Bushing or KB). B: Correlation between synthetic and line TR-8. C: Detailed view of line TR-8 in the vicinity of the deep half graben northeast of the rollover anticline showing correlations between the seismic data and wells. Abbreviations as in Figure 5.

(Lysonski et al., 1980; Simpson, 1986; Jachens et al., 1989; Mickus and James, 1991; Campbell and John, 1996). The denser basement in these areas could be caused by a higher metamorphic grade or a more mafic composition. Reflectivity near the base of the crust may be a result of interlayered mafic and ultramafic material (e.g., Klemperer et al., 1986; Goodwin and McCarthy, 1990; Holbrook et al., 1991; McCarthy and Parsons, 1994).

Crustal reflectivity beneath the mylonitic front probably originated at or below mid-crustal depths (4–5 s) within a zone of widespread ductile deformation, which included mid-crustal flow toward the core complexes (e.g., Gans, 1987; Wernicke and Axen, 1988; Spencer and Reynolds, 1989; Block and Royden, 1990; Kruse et al., 1991; Kruger and Johnson, 1994; Lachenbruch et al., 1994; McCarthy and Parsons, 1994; Feuerbach et al., 1996). This suggests that after the reflective fabric formed, it was brought to shallow crustal depths by detachment faulting, upper crustal tectonic denudation, and uplift of the White Tank metamorphic core complex.

The mylonitic front is also interpreted on line TR-8 between the 26 km position and the southwest end of the line (Fig. 4). Its approximate position is inferred from the lack of mylonites in lower-plate exposures along line TR-8, alignment of southwest-dipping reflection segments between the 35 km position and the southwest end of TR-8 (Fig. 4), and a well-defined upper bound-

file 803

Clues point to oil in Arizona's deep Tertiary

Steven L. Rauzi
Arizona Oil & Gas Conservation Commission
Phoenix

Evaluation of several wells near Wittmann, Ariz., suggests the need for additional drilling in the deep Tertiary basins of central Arizona.

In one of the earlier wells, 1 Wittmann, the driller reported as much as 1,600 ft of light oil in a test. Unfortunately, an unsuccessful water shut-off attempt prevented this well's completion.

Later drilling in 1981 and 1982 yielded mixed results and provided information on rotary drilling conditions and costs and basin stratigraphy.

Four of the wells described were drilled on private land and the fifth on a state lease.

Federal land is found in several, mostly isolated, areas in the valley but predominates in the mountains and to the west. One small federal tract, surrounded by private land, over a large salt deposit was picked up in the March 1991 U.S. Bureau of Land Management lease sale.

State land is available on a non-competitive basis and carries a 5 year term with a one eighth royalty on any production.

A major concern is the apparent lack of a good oil and gas source rock in the area. However, a thick section of deeply buried salt at the southern end of the valley is recognized by some to be just such a source.

In the most recent well, the 1-19 Suncor, more than 2,000 ft of salt was drilled, but no well has penetrated the base of the salt.

Seismic data over the salt suggest that it may extend to a depth of 12,000-15,000 ft. On a more regional basis, gravity and magnetic data show this valley to be one of the deepest in the southern part of Arizona.

The current report provides a summary of the data available in the well files and sample repository of the Arizona Oil & Gas Conservation Commission.

The well data are listed (see table), and the location of the wells and Sections A-A' and B-B' in Maricopa County are shown (Fig. 1).

Fig. 1

Wittmann area exploratory drilling

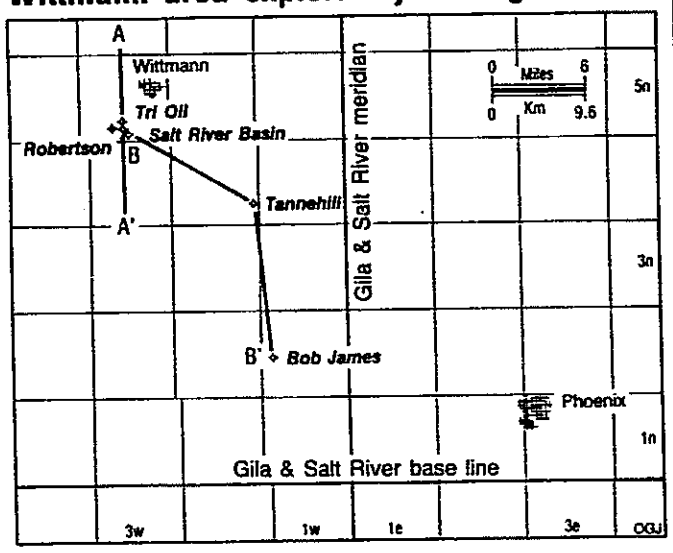
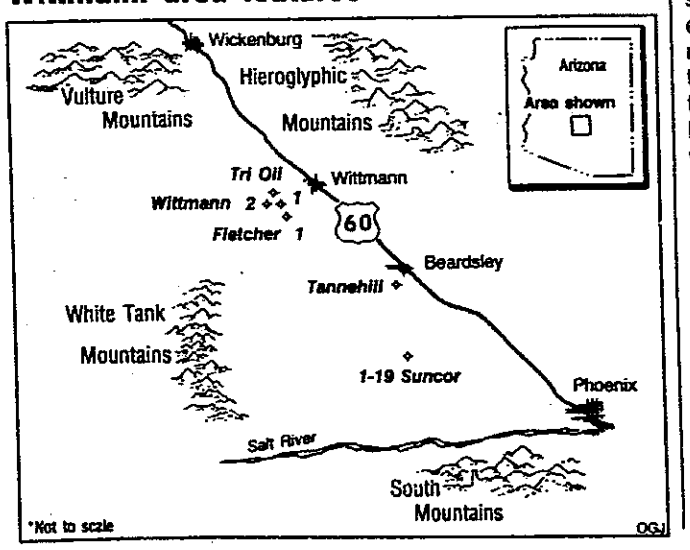


Fig. 2

Wittmann area features*



Wittmann area

The Wittmann area is a broad, flat valley floored with Tertiary sediments.

The valley is both topographic and structural in that it is bounded by upfaulted, erosionally subdued mountains of Precambrian to Tertiary crystalline and metamorphic rocks.

The Vulture and Hieroglyphic mountains bound the area on the north and northeast, the White Tank Mountains are on the southwest, and the South Mountains are on the southeast. The Salt River drains the area at the south end of the valley (Fig. 2).

Selected wells, Wittmann area, Maricopa County, Ariz.

Operator	Well	Location	Year drilled	Total depth, ft	Formation at total depth	Remarks
Tannehill	1 Beardsley	SE NE 25-4n-2w	1923	3,350	Tertiary sediments*	Shows in two sands, no tests
Robertson	1 Wittmann	NE NE 33-5n-3w	1944	4,280	Volcanic rock†	1,600 ft oil recovered in test
Robertson	2 Wittmann	NE NW 33-5n-3w	1946	4,970	Volcanic rock†	Shows at 4,650 ft, no tests
Salt River	1 Fletcher	SW NW 34-5n-3w	1981	3,980	Precambrian schist	No shows or tests
Tri Oil	78-28 State	SE SE 28-5n-3w	1982	4,520	Precambrian schist	Swabbed trace to show of oil
Bob James	1 Suncor	NE NE 19-2n-1w	1988	4,000	Tertiary salt	Show at 3,000 ft, no tests

*Probable. †Questionable.

The Tertiary sediments just southwest of Wittmann are about 4,000 ft thick. They thicken to more than 11,000 ft 20 miles to the southeast, where the Tertiary section includes a large volume of relatively pure nonmarine salt (Fig. 4).

The valley slopes gently southward toward the Salt River. Elevations of the valley floor range from 1,600 ft near Wittmann to 900 ft at the river.

Elevations exceed 4,000 ft in the Vulture and Hieroglyphic Mountains, 3,500 ft in the White Tank Mountains, and 2,500 ft in the South Mountains.

These ranges contain Proterozoic schist similar to and herein correlated with the schist in the Tri Oil and Salt River Basin wells near the town of Wittmann (Fig. 1).

Early wells

The Tannehill 1 Beardsley was the earliest well to be drilled in the study area.

This well was drilled in 1923 and is located near the small town of Beardsley in SE NE 25-4n-2w (Fig. 1).

Tannehill drilled the 1 Beardsley with cable tools. His driller reported a gray sand with globules of oil at 2,208-10 ft. He also reported shows in a brown sand at 2,518-40 ft.

A black shale saturated with oil and showing gas was reported at 3,252-80 ft. The TD of the 1 Beardsley is 3,350 ft in probable Tertiary sediments (Fig. 4).

A note on the driller's log records the static water level in the hole. It stood at 138 ft and was drawn down to 183 ft after pumping.

J.J. Robertson drilled the first well near the town of Wittmann in 1944. His well, the 1 Wittmann, is located just southwest of Wittmann in NE NE 33-5n-3w (Fig. 1).

The logs, cores, and cuttings are not available for 1 Wittmann. However, the file on this well does contain the driller's recollection of the operation.

His account describes light oil recovered in a test and a show of oil in a conventional core. He claimed that this core was analyzed at the Tucson School of Mines, where it was considered to be of Permian age.

This driller, Lance Fletcher, provided the financial backing for the nearby 1 Fletcher well drilled in 1981. That he returned to finance this later well lends credence to his recollection of the test in the 1 Wittmann.

In a letter in the well files of the Arizona Oil & Gas Conservation Commission, Fletcher recalled the test as follows:

"A medium to strong blow was immediate, it became stronger until oil surfaced after about a minute."

He went on to report the amount of fluid recovered in the test: 1,600 ft of 36° gravity oil and 1,600 ft of salt water. When the crew tried to shut off the water, they cemented the tubing in the hole.

The core description, the scenario of the test, and the tubing being cemented in the hole suggest that a light oil is trapped at this location.

That it was not developed was due to mechanical problems. Alternatively, these reports suggest that oil has migrated through the Wittmann area.

TD of the 1 Wittmann is reported to be at 4,280 ft in volcanic rock.

Robertson drilled the 2 Wittmann in 1946 in NE NW 33-5n-3w, about 1,500 ft west of the 1 Wittmann (Fig. 1).

He apparently drilled this well to re-enter the oil zone that was lost when tubing was cemented in the 1 Wittmann. However, it seems unusual to the author that he would have stepped out so far from the original hole.

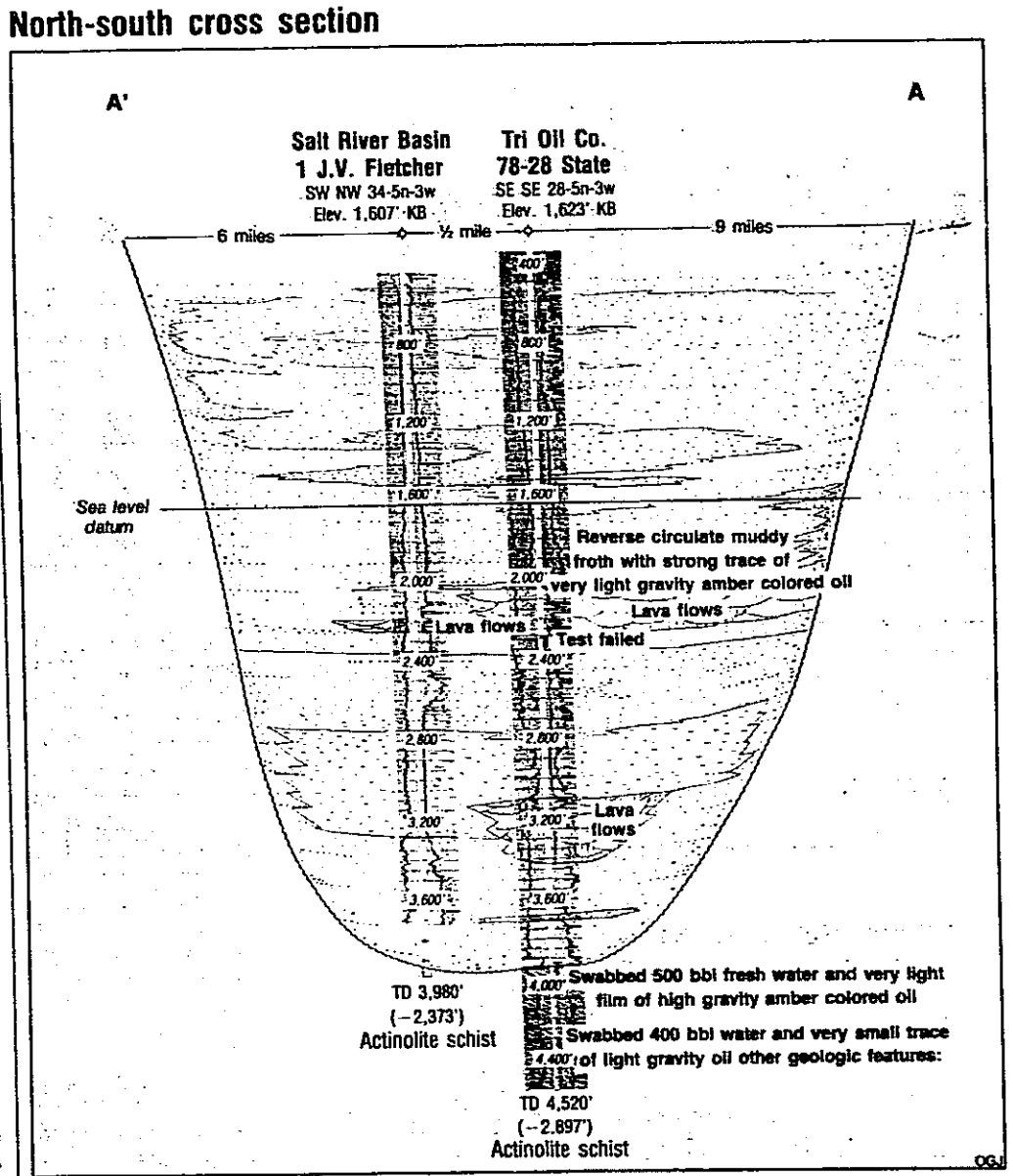
The 2 Wittmann file contains a very general lithologic summary. It reports sand and gravel to 3,100 ft, conglomerate to 3,800 ft, and volcanic rock from 3,800 ft to TD 4,970 ft. It also records a show of oil from 4,650-60 ft in the volcanic rock. No tests are reported.

Modern drilling

Salt River Basin Joint Venture drilled the 1 Fletcher in 1981 in SW NW 34-5n-3w,

Fig. 3

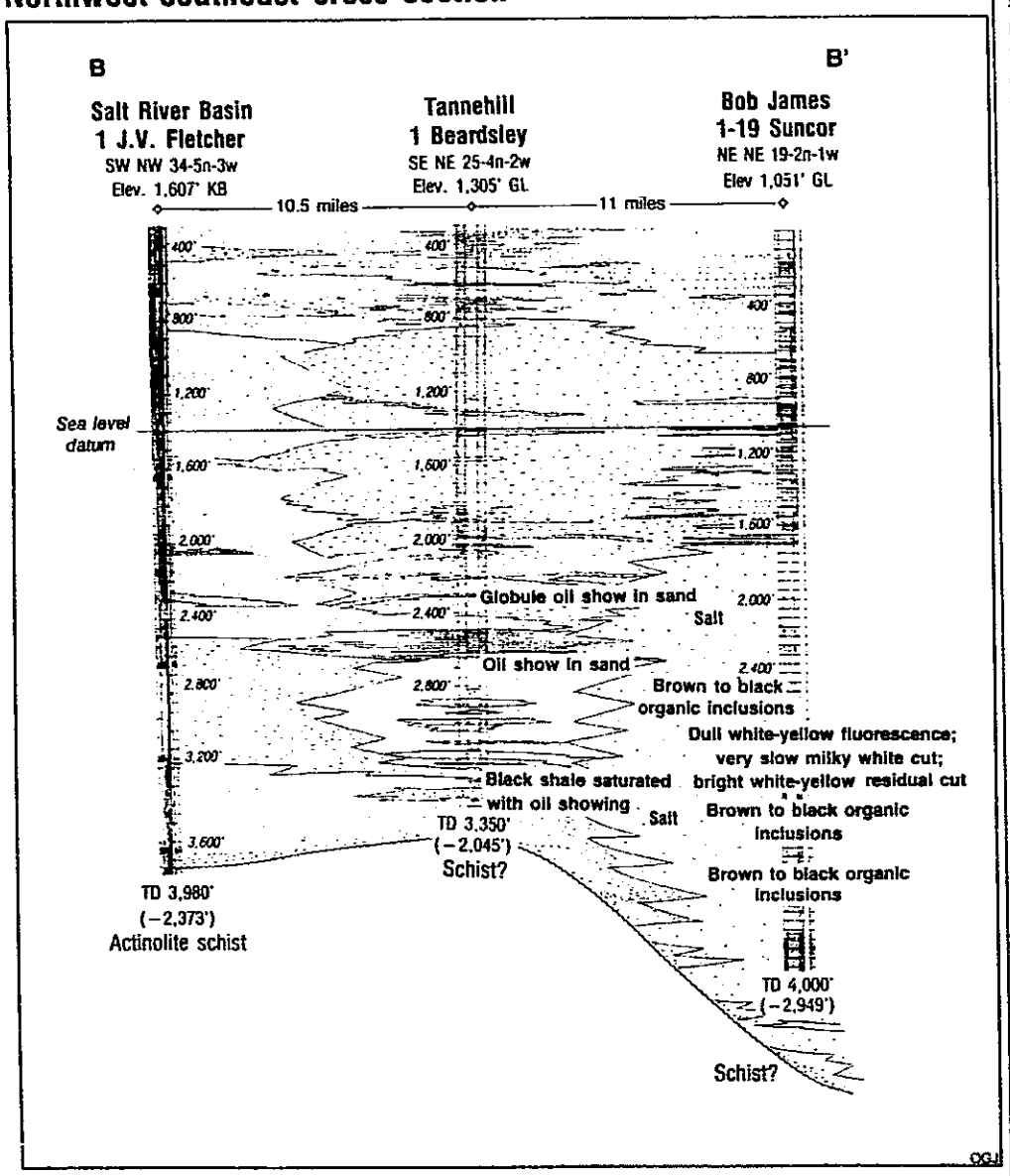
North-south cross section



ig. 3

Fig. 4

Northwest-southeast cross section



about 1,350 ft southeast of 1 Wittmann (Fig. 1).

Lance Fletcher, the previously mentioned driller on the 1 Wittmann well, was the lease holder and financier for the 1 Fletcher.

The mud and electric logs record a continuous sequence of fine- to coarse-grained, varicolored alluvium and colluvium. A 50 ft thick volcanic flow is present at 2,200 ft.

The interval 2,700-3,400 ft is notably silty and clayey, indicating the development of an effective seal in this part of the basin. Precambrian actinolite schist was penetrated at 3,940 ft, and the well bottomed in schist at 3,980 ft (Figs. 3, 4). No shows or tests are reported.

In 1982, the Tri Oil 78-28 State was the most recent well to be drilled in the vicinity of Wittmann (Fig. 1). The 78-28 State is in SE SE 28-5n-3w, about 1,350 ft due north of 1 Wittmann and about one half mile northwest of 1 Fletcher.

The operator ran dual-induction, sonic, neutron, and dipmeter logs and set and cemented 7 in. casing to 4,517 ft. He then perforated and attempted to test several zones.

The first test at 2,020-21 ft failed because of a loose joint.

The second test at 2,337-38 ft recovered seven stands of hole fluid in 1 hr from another loose joint.

The third test at 4,216-17 ft recovered 3,800 ft of fresh water in 41 min. It had a final flowing pressure of 1,597 psi.

After these three tests, 221 holes were shot across two large intervals, 2,024-2,343 ft and 3,935-4,514 ft.

The well was then fractured using 52 tons of sand. Swabbing recovered fresh water with strong traces to slight shows of gas and light oil.

Unfortunately, the large interval of perforated pipe made it difficult for the operator to tell which zone in the well was effectively stimulated. Tri Oil could not determine which perforations were yielding the oil, and it failed to control the inflow of water.

The operator admitted such and wrote that he had no doubt that he had failed to find and produce a significant oil and gas saturation in this well.

The Bob James 1-19 Suncor well is in NE NE 19-2n-1w (Fig. 1).

This well is included here because it provides information on the probable source for the oil and gas reported in the wells drilled near the towns of Wittmann and Beardsley.

The 1-19 Suncor was drilled in 1988 to test sand objectives below a large deposit of salt near Luke Air Force Base (Fig. 4).

The Suncor well penetrated salt at 1,720 ft and was still in salt at TD 4,000 ft.

The mud log records sandstone, claystone, and several beds of anhydrite overlying the salt. It also records several thin beds of orange to brown claystone within the salt and a thin bed of black shale encased in salt at 3,950 ft.

Several zones of brown to black organic inclusions are reported in the salt, and a particularly interesting zone of very slightly calcareous to clayey siltstone is reported at 3,000 ft.

This siltstone has a dull white to yellow fluorescence with a very slow milky white cut. The siltstone also has a bright white to yellow residual cut but no odor or visible stain.

Since the Suncor well was still in salt at TD, its primary objective of testing sands below the salt was not accomplished. Testing of the supposed sands is still a valid objective.

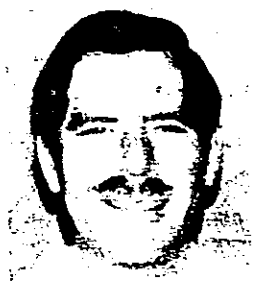
Additional objectives include salt overhangs, stratigraphic intertonguing around the periphery of the salt, and faulted wedges of sediment within the salt.

This well offers a probable source for the oil and gas reported in the several wells in the Wittmann area.

Possible oil source rocks

The oil and gas shows reported in the Tannehill, Wittmann, and Tri Oil Co. wells indicate that oil and gas are

The author . . .



Rauzi

Steven L. Rauzi grew up in Moab, Utah, and received BS and MS degrees in geology from Utah State University in Logan. From 1980-87 he worked for Texaco in Los Angeles as an exploration and development geologist. Since 1988 he has been the oil and gas program administrator for the Arizona Oil & Gas Conservation Commission in Phoenix.

present in this area.

At the least, these shows record a period of oil and gas migration through the basin. If a potential source rock for oil and gas can be described, then the reported shows in these wells take on a greater significance.

At least two possible source rocks for oil and gas have been identified. The first is the "black shale saturated with oil" in the Tannehill well.

The second, and more likely source, is the thick section of salt, and intimately associated sediments, in the Suncor well (Fig. 1).

In fact, the shows in the Wittmann area wells suggest that oil migrated out of and away from the deeply buried salt at Luke Air Force Base. At least 20 miles of oil migration is indicated.

Luke salt

The salt at Luke, or Luke salt, is at least Miocene in age.

It is overlain by basalt that has been age dated at about 10.5 million years.[1]

The average bromine content of the Luke salt is about 2 ppm. Values of less than 30 ppm bromine tend to represent nonmarine salt, and the Luke salt deposit is probably of lacustrine or playa origin.[2] The sheer volume of relatively clean salt at Luke tends to suggest a lacustrine deposit.

The organisms in saline lakes normally include a narrow range of species that grow in remarkable abundance.[3] These authors cite several examples of abundant biotas in saline lakes.

For example, they describe saline lakes that provide sufficient food for enormous flocks of flamingos, in some cases a million or more birds.

Most species of flamingos obtain their food from organic rich bottom muds. These saline lakes must therefore maintain a high productivity of phytoplankton, which settle and are incorporated into the bottom muds.

Under the right conditions, these muds, along with significant amounts of bird droppings, can be preserved and become good source rocks for oil and gas.

Like modern saline lakes, the lake, or lakes,[4] in which the Luke salt was deposited could very well have sustained an abundance of organisms that accumulated as organic rich bottom muds.

In the case of Luke, organic rich muds may have been concentrated during volcanic-associated phytoplankton "blooms." Thus extra-rich muds in the Luke salt could correlate with periods of increased volcanic activity.

The "oil-saturated black shale" reported in the Tannehill well could represent just such a relationship. Salt-associated source beds may well be a significant factor not just in the oil and gas play of the Wittmann area but in the entire Phoenix basin as well.

Heat source, stratigraphic trap

Gravity and magnetic data suggest that the Luke salt is at least 10,000 ft thick.[2,5]

Seismic data suggest that it may extend to a depth of 12,000-15,000 ft.[6] These depths are sufficient to generate oil and gas.

Sufficient heat and pressure necessary to generate oil and gas from salt-associated source beds also may have been provided by Tertiary intrusion and volcanism. Such was the case at Dinehbi-Keyah field in northeastern Arizona.

There, a Tertiary sill was intruded into Pennsylvanian carbonate rocks. That sill was intruded into Pennsylvanian carbonate rocks. That sill has produced more than 17 million bbl of oil.[7]

Concrete evidence of such intrusive relationships has not been documented in the study area, but a sill intruded into either the black shale described in the Tannehill well or organic-rich muds associated with the Luke salt offers the same possibility for stratigraphic traps in the Wittmann area.

Conclusion

The 1 Wittmann was reported to have produced 1,600 ft of light oil and 1,600 ft of salt water in a cased hole test.

Unfortunately, mechanical problems and an unsuccessful water shut-off attempt prevented development of the Wittmann well.

Shows of oil also were reported in two sands in the Tannehill Beardsley well. If these sands pinch out laterally into clay, stratigraphic traps are possible in the undrilled parts of this basin.

Two possible sources for oil and gas in the Wittmann area include the "oil-saturated black shale" in the Tannehill well and the thick section of Miocene salt in the Suncor well.

The salt in the Suncor well may serve as a trapping mechanism to oil and gas below the salt.

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3. Kirkland, D.W., and R. Evans, Source-rock potential of evaporitic environment: AAPG Bull., Vol. 65, 1981, pp. 181-190.
4. Lowery, C.J., Sedimentation of Cenozoic deposits in western Salt River Valley, Arizona: unpublished master's thesis, Arizona State University, Tempe, 1964.
5. Oppenheimer, J.M., Gravity modeling of the alluvial basins, southern Arizona: unpublished master's thesis, University of Arizona, Tucson, 1980.
6. Gary Stewart, personal communication, 1991.
7. Arizona Oil & Gas Conservation Commission, well files and sample cuttings.

KANSAS

Caribou Resources, Denver, has staked eight 2,000 ft geological wildcats in Pomona and North Pomona fields of Franklin County.

Targeting Cambro-Ordovician Arbuckle, the wells are in 35- and 36-15s-18e; 13-, 24-, and 25-16s-17e; and 8-, 16-, 18-, and 20-16s-18e.

Sites are 5-7 miles west and northwest of Ottawa.

KENTUCKY

Equitable Resources Exploration Co., Kingsport, Tenn., reported completing two western Kentucky discoveries during 1990.

The K10001 John Hopkins Hospital, 16-K-27, Hopkins County, pumped 50 b/d of oil from Mississippian Cypress perforations at 2,171-91 ft. The discovery opened East Earle Creek field.

Total depth is 4,243 ft. The well encountered noncommercial gas shows in New Albany at 3,820-46 ft and 3,968-4,052 ft, Petroleum Information reported.

Equitable has drilled five other wells nearby. It plugged two, completed one as an oil producing well, and was placing the other two on the pump. It has also staked a seventh test in the area.

Equitable also completed K10002 Andrew Mast, 7-K-18, 4 miles north of Marion in Crittenden County.

It flowed 40 Mcfd of gas from Devonian New Albany shale at 2,260-2,458 ft and 2,518-2,620 ft. Total depth is 2,841 ft.

Well site is about 6 miles northwest of Tribune field, which produces oil from Mississippian McClosky.

The discovery well is more than 30 miles northwest of

Oil and Gas Conservation Commission
STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

Called Gary 10/23/90: No geochem on samples – none appeared promising. "Just a pile of sand from top to bottom" No seals identified. SLR

June 21, 1990

Samples returned 11/2/90 SLR

Mr. Gary C. Stewart
Melange & Associates, Inc.
821 17th Street, Suite 600
Denver, CO 80202

RE: Well cuttings, Tri Oil Company State 78-28

Dear Gary:

We appreciate your interest in the sample cuttings from the Tri Oil State 78-28 well and have your request for these samples on file. We agree to loan the samples and request that they be returned as soon as possible after your analysis. The samples are being shipped under separate cover.

We are loaning these samples for hydrocarbon and source rock analysis in that you have agreed to observe our sample policy and take reasonable and customary measures to maintain the integrity and volume of each individual sample. Based on your agreement, we approve the conservative use of pyrolosis or other such destructive tests on fractions of individual samples. A copy of our sample policy is enclosed for your file.

Please note that you are required to provide study results within 30 days of their completion. Up to one year of confidentiality will be granted as described in point 9 of the sample policy.

We look forward to the results of your study and if we can provide additional assistance please don't hesitate to give us a call.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Specialist

Enclosure

AZ OIL & GAS
CONSERVATION COMMISSION
JUN 13 1990

RECORD OF OGCC MATERIAL TAKEN FROM OFFICE TO BE RETURNED

Description of Material:

Well cuttings samples and any core chip available from the TRI OIL Company STATE # 78-28 SE 28, T5N - R3W MARICOPA Co. ARIZONA. The purpose of this request is to review cuttings for hydrocarbon shows AND source Rock probability.

I, (print) GARY STEWART, representing MELANGE ASSOCIATED, INC., whose address is ~~6~~ 821 17th Street, SUITE 600, DENVER CO 80202. and whose phone number is (303) 298-9415 am in receipt of the above described material this _____ day of _____ 19__, and will return same to the OGCC office on the _____ day of _____ 19__.

(Signature)

Authorized by:

Steven L. Ramos

6/21/90 Shipped via UPS box 3: 1240-1710, 4: 1710-2170, 5: 2170-2520 6: 2520-2900, 7: 2900-3220, 8: 3220-3580, and 9: 3580-4050

returned 11/2/90 SLR

OIL & GAS CONSERVATION COMMISSION

SAMPLE POLICY

The Oil and Gas Commission hereby adopts the following as its policy regarding samples and cores. In the declaration of policy "samples" is meant to include rotary and cable tool cuttings and chips and cores, core slabs and core chips.

1. Samples received by the Commission under Rule 12-7-21 shall be preserved and maintained in good order.

2. A record or file shall be kept indicating the location of samples from each well.

3. Samples are to be maintained for use as a public library.

4. Samples may be examined on the premises by any person requested to do so. Reasonable notice for retrieval of the samples may be required.

5. Samples may be loaned for use off-premises to any responsible person at the discretion of the Commission.

6. Users of samples shall take reasonable and customary measures to maintain the integrity and volume of each individual sample and shall not mix samples together.

   a. Users may use ordinary tests for mineralogical determination. Acid must not be placed in the bulk sample, rather one or two individual grains may be removed to a separate container for acid tests.

   b. Solvents must not be placed in the bulk sample, rather one or two individual grains may be removed to a separate container for solvent tests.

   c. In no case shall bulk solvent extraction, pyrolosis or other destructive tests be run on any samples without prior permission of the Commission.

7. Users shall return all individual samples to their original containers. If the container is damaged beyond use, a new container shall be provided.

8. Users shall replace all samples in order from top of the hole down in the original sample box.

9. Users shall provide the Commission, within 30 days of their completion, copies of all logs, paleontological and other reports, maturation studies, source rock analysis and any other study or analysis made possible by use of samples from the Commission's library. The Commission will grant a 6-month confidentiality period if so requested by the owner of the report and may grant one six-month extension of the period of confidentiality if so requested.

11/21/86 - ADOPTED AS REVISED BY THE OIL AND GAS CONSERVATION COMMISSION.

Tri-Oil Company
State 78-28 (803)
Sample set # 1841

(1) 310 - 840
(2) 840 - 1240
(3) 1240 - 1710
(4) 1710 - 2170
(5) 2170 - 2520
(6) 2520 - 2900
(7) 2900 - 3220
(8) 3220 - 3580
(9) 3580 - 4050
(10) 4050 - 4540

Shipped boxes (3) thru (9) to
Melange Assoc. 6/21/90 in 2 boxes

35 lb (12 x 12 x 18) = 39.00
6 lb (3.5 x 5.5 x 15) = 12.00

Samples returned 11/2/90 SLB

Salt River basin
Fletcher 1 (773)
Sample set # 1822

(1)
(2) 2180 - 2610
(3) 2610 - 3030
(4) 3030 - 3500
(5) 3500 - 3900

Oil and Gas Conservation Commission
STATE OF ARIZONA
3110 N. 19th AVENUE, SUITE 190
PHOENIX, ARIZONA 85015
PHONE: (602) 255-5161

March 9, 1989

Mr. Lee W. Gibson
20511 South Blythe Ave.
Riverdale, CA 93656

Re: Permit No. 803
Bond #402F9798

Dear Mr. Gibson:

We are in receipt of your letter of February 27, 1989.

I have enclosed copies of our authorization to release the referenced bond.

If we can be of further service, please advise.

Sincerely,

Steven L. Rauzi

Steven L. Rauzi
Oil & Gas Specialist

Encl.

LEE W. GIBSON
GEOLOGICAL ENGINEER
20511 S. BLYTHE AVE. • RIVERDALE, CALIFORNIA 93656 • PHONE (209) 867-3361

RECEIVED
MAR 9 1989
O & G CONS.

OWNER: LEE GIBSON OIL COMPANY

February 27, 1989

State of Arizona
Oil & Gas Conservation Commission
1645 W. Jefferson
Phoenix, Arizona 83007

Gentlemen:

Re: State 78-28
T. 5 N. r. 3 W., Maricopa Co.
Oil & Gas Drilling Bond
#402F9798, Tri Oil Co.

As agent for the now defunct Tri Oil Co., I request termination of the bond referred to in the enclosed notice from The Travelers Indemnity Company.

With a hired bulldozer, I recently completed the abandonment by filling in and levelling the old sump, and removing the fence and all trash on the site. The enclosed snapshots illustrate the resulting condition of the location.

Yours very truly,

Lee W. Gibson

cc: The Travelers Indemnity Company
P. O. Box 8013
Walnut Creek, CA 94596-1279
Attention: Donald B. Young

Clifton Carpenter Insurance
P. O. Box 2441
Bakersfield, CA 93303

The Travelers

THE TRAVELERS
THE TRAVELERS INDEMNITY COMPANY
Hartford, Connecticut

RECEIVED
MAR 9 1989
O & G CONS. COMM.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOTICE OF CANCELLATION

2-3-89, 19__

State of Arizona
Oil & Gas Conservation Commission
1645 W. Jefferson
Phoenix, AZ 85007

Bond No. 402F9798
Principal TRI-OIL CO.

On the 8th day of April, 19 82, THE TRAVELERS INDEMNITY COMPANY, as Surety, executed a(n) Oil & Gas Drilling bond in the penalty of FIVE THOUSAND AND NO/100ths-- Dollars ($ 5,000*), on behalf of TRI-OIL CO. of Riverdale, CA as Principal, in favor of State of Arizona, as Obligee. The bond, by its terms, provides that the Surety may terminate its liability by giving notice of its election to do so to the Obligee. In accordance with the terms of the bond we hereby elect to terminate our liability and shall, as of the 8th day of April, 19 89 consider ourselves released from all liability by reason of any default committed thereafter by the Principal.

Below is an Acknowledgement which we would appreciate your signing and returning.

CC: PRINCIPAL & AGENT

THE TRAVELERS INDEMNITY COMPANY

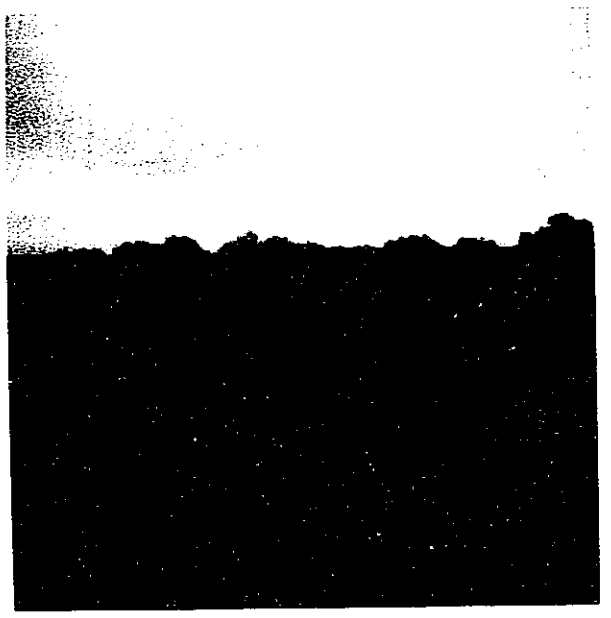
By:
Donald B. Young, Attorney-in-Fact

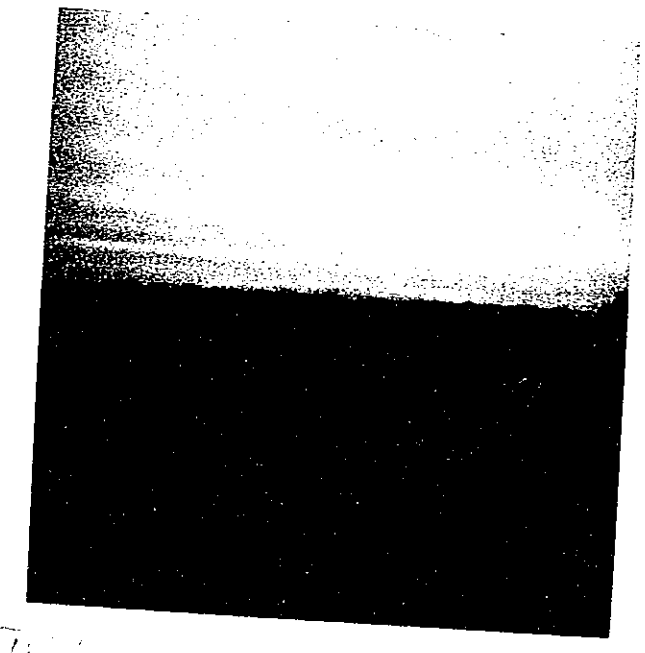
Walnut Creek Office

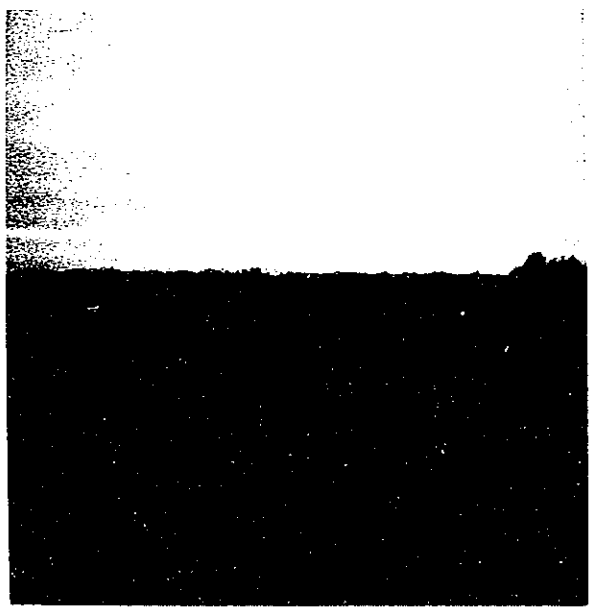
The Travelers
P.O. Box 8013
Walnut Creek, CA 94596-1279

SAN FRANCISCO
DROP SHIPMENT
AUTHORIZATION 88
FEB-4'89

Tri-Oil Company
20511 South Blythe
Riverdale, CA 93656





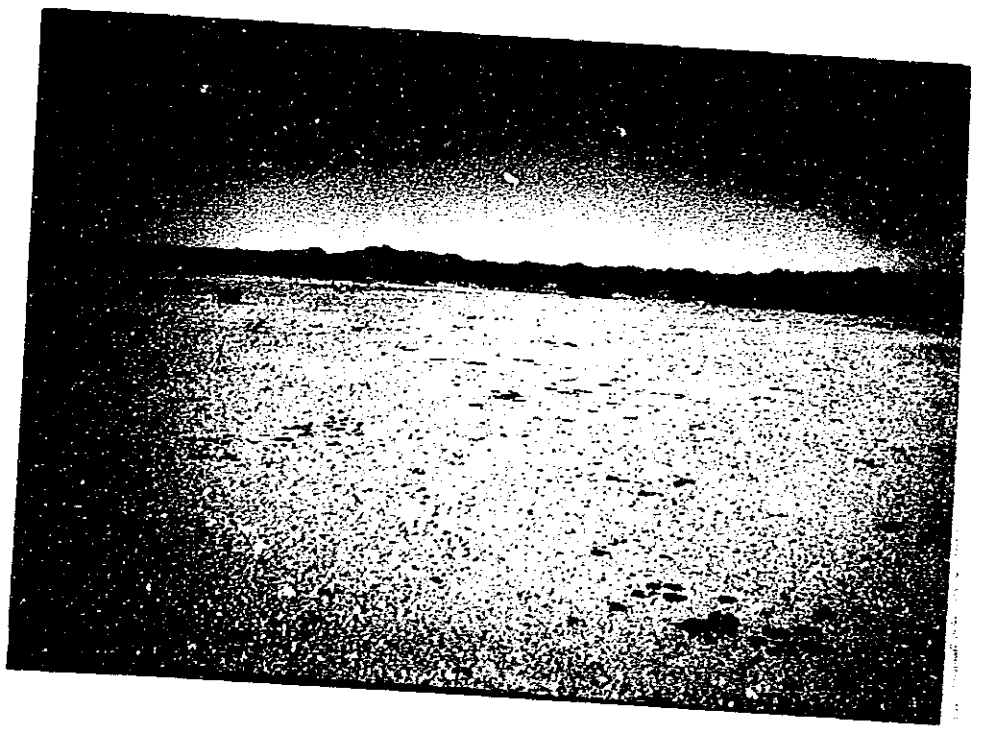


Tr: Oil 78-28 State, Sec. 28-5N-3W

permit No. 803

3-2-89

Restored Location



Thi Oil 78-28 State, Sec. 29-5N-3W

Permit No. 803

3-2-89

Restored Location

3-2-89

Oil and Gas Conservation Commission
STATE OF ARIZONA
3110 N. 19th AVENUE, SUITE 190
PHOENIX, ARIZONA 85015
PHONE: (602) 255-5161

March 2, 1989

Steve Rauzi and I inspected the site of the Tri Oil State No. 78-28, Sec. 28, T.5N,R.3W. today. We found the well site to have been fully cleaned up. Well drilling debris was not present. The pit had been filled and the located well-levelled. Vegetation has started to grow back on the site.

As of this date we authorize release of the bond posted by Tri Oil.

Daniel J. Brennan
Executive Director

#805

FEB 27 1989

THE TRAVELERS

THE TRAVELERS INDEMNITY COMPANY

Hartford, Connecticut

RESENT 2-23-89

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOTICE OF CANCELLATION

2-3-89, 19__

State of Arizona
Oil & Gas Conservation Commission
~~1645 W. Jefferson~~ 3110 19th AVE, SUITE 190
Phoenix, AZ 85007
25015

Bond No. 402F9798
Principal TRI-OIL CO.

On the 8th day of April, 19 82, THE TRAVELERS INDEMNITY COMPANY, as Surety, executed a(n) Oil & Gas Drilling bond in the penalty of FIVE THOUSAND AND NO/100ths-- ------- Dollars ($ 5,000*), on behalf of TRI-OIL CO. of Riverdale, CA as Principal, in favor of State of Arizona, as Obligee. The bond, by its terms, provides that the Surety may terminate its liability by giving notice of its election to do so to the Obligee. In accordance with the terms of the bond we hereby elect to terminate our liability and shall, as of the 8th day of April, 19 89 consider ourselves released from all liability by reason of any default committed thereafter by the Principal.

Below is an Acknowledgement which we would appreciate your signing and returning.

CC: PRINCIPAL & AGENT

THE TRAVELERS INDEMNITY COMPANY

By: Donald B. Young
Donald B. Young, Attorney-in-Fact

Please detach and return to
THE TRAVELERS INDEMNITY COMPANY
at the following address:

Surety - P.O. Box 8013
Walnut Creek, CA 94596
(415) 945-4172

Principal TRI-OIL CO.

402F9798
Bond No.

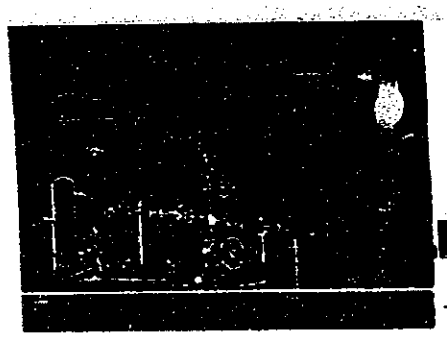
ACKNOWLEDGEMENT

Your Notice of Cancellation has been received. We have arranged to cancel the bond effective the 8th day of ~~XXXX~~ April, 19 89.

Date: March 2, 19 89

By

S-2025 REV. 3-69 PRINTED IN U.S.A. (281)



LEE W. GIBSON GEOLOGICAL ENGINEER

20511 S. BLYTHE AVE. • RIVERDALE, CALIFORNIA 93656 • PHONE (209) 867-3361

OWNER: LEE GIBSON OIL COMPANY

P/10 803

AKS 04

October 5, 1984

RECEIVED
OCT 10 1984
O & G CONS. COMM.

R. A. Ybarra
Oil & Gas Conservation Commission
State of Arizona
1645 West Jefferson, Suite 420
Phoenix, Arizona 85007

Dear Mr. Ybarra:

Please advise me if the enclosed is insufficient.

This will confirm my intent to finish by mid year, 1985, the surface abandonment of Tri Oil Co. State 78-28. Also, I hope and believe I shall have funding for the drilling of another test well nearby by then.

It should be of interest to the State that we encountered fresh water from top to bottom in State 78-28 except for the interval from 2383' to 3090' which the electric log cearly shows to be saline. The interval from 3090' to 3900' could be either saline or fresh water. If that interval is saline, its moderately high resistivity would have to have been caused by cementation.

For your interest, we believe the schist and volcanic formations have exceedingly high permeabilities.

I have not been proud of our testing program on State 78-28. Economics dictated no coring and doing all the perforating at once, from which all kinds of predictable troubles arose. I'll not do that again under any circumstances! In the end, however, I had no doubt that there was significant oil or gas saturdation which we had failed to find and produce.

With best regards,

Lee W. Gibson

REGISTERED PROFESSIONAL ENGINEER

OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

1645 WEST JEFFERSON, SUITE 420
PHOENIX, ARIZONA 85007
PHONE: (602) 255-5161

August 22, 1984

Tri Oil Company
20511 South Blythe Avenue
Riverdale, California 93656

RE: Permit 803
Well No. 78-28 State
Maricopa County

Gentlemen:

This letter is to remind you that a Well Completion Report on subject well has not been received in this office.

Please complete the enclosed copy and return to us as soon as possible. Thank you.

Also, do you have any idea when you plan to complete the final surface restoration on the well? The bond cannot be released until this work has been properly completed.

Hope to hear from you soon.

Sincerely,

R. G. Ybarra

R. A. Ybarra
Enforcement Director

Enclosure

803

TO: OIL & GAS CONSERVATION COMMITTEE
STATE OF ARIZONA
1645 W. Jefferson, Suite 420
Phoenix, AZ 85007

RECEIVED
FEB 21 1984
O & G CONS. COMM.

CLIFTON CARPENTER INSURANCE
Complete Insurance Service
1829 "F" STREET — P. O. BOX 2441
BAKERSFIELD, CALIFORNIA 93303-2441
Phone: (805) 325-5091

SUBJECT: TRI-OIL CO.
Travelers Bond #402F9798
Well "State" 78-28, Maricopa County, AZ

DATE: 2-16-84

Gentlemen:

When we contacted you last year on 2-28-83 concerning the status of the "dry hole" drilled under above bond, you advised the bond could not be released at that time because the surface restoration work had not been completed; that the reserve pit had not been fully restored and that it would probably take a few more months to fully dry up. If this bond is now eligible for release, please forward a letter to Travelers, P.O. Box 8013, Walnut Creek, CA 94596, Atten: Bond Dept., so that it can be released. It has its renewal date in April, 1984, and we would like to get it released as soon as possible. Also let us know. Thank you.

PLEASE REPLY TO →

SIGNED John Carpenter

REPLY

Gentlemen:

Subject bond is not eligible for release, as the surface restoration work has NOT been completed.

DATE: 2/28/84

SIGNED R.A. Utana

THIS COPY FOR PERSON ADDRESSED

Harvey Owen

9507 Timberline Dr.

Sun City,

602-974-8696

TIMESAVER = REPLY G

THE MINES PRESS, INC. NEW YORK, N. Y. 10014

TO OIL & GAS CONSERVATION COMMITTEE
STATE OF ARIZONA
1645 W. Jefferson, Suite 420
Phoenix, AZ 85007

CLIFTON CARPENTER INSURANCE
Complete Insurance Service
1820 "F" STREET — P. O. BOX 2141
BAKERSFIELD, CALIFORNIA 93303-2441
Phone: (805) 325-5091

SUBJECT: TRI-OIL CO.
Travelers Bond #402F9798
Well # "State" 78-28, Maricopa County,AZ

DATE: 2-28-83

Gentlemen:

We understand that the above well was drilled and resulted in a "dry hole". We would like to get the bond issued through our agency released if all conditions of abandonment have been approved by your agency. Will you please advise if this bond is eligible for release, and if so, then forward a letter to Travelers, P. O. Box 8013, Walnut Creek, CA 94596, atten: Bond Dept. so that it can be released. It has its renewal date in April, 1983, and we would like to get it released as soon as possible.

PLEASE REPLY TO → SIGNED John Carpenter

REPLY Dear Mr. Carpenter:

Surface restoration work on subject well has not been completed. The reserve pit has not been fully restored.

It will probably take a few more months to fully dry up.

DATE: March 4, 1983 SIGNED R. G. Hanna

P/N 803

PERSON ADDRESSED RETURN THIS COPY TO SENDER

April 13, 1982

Tri Oil Company
20511 S. Blythe Ave.
Riverdale, CA 93656

Re: 78-28 State
Permit No. 803

Gentlemen:

Enclosed are approved application for permit, permit, approved performance bond, and receipt for the referenced well.

Also enclosed are instructions for weekly progress reports and instructions for handling well samples.

If we can be of further service, please advise.

Sincerely,

R. A. Ybarra
Enforcement Director

/os
Enc.

RECEIVED
MAY 11 1983
O & G CONS. COMM.

THE TRAVELERS

May 9, 1983

State of Arizona
Oil & Gas Conservation Commission
1645 West Jefferson
Phoenix, Arizona 85007

RE: TRI-OIL CO., 20511 South Blythe, Riverdale, CA 93656
Oil & Gas Well bond no. 402F9725
$10,000 bond amount effective March 17, 1982
"G & L Trust" #1, Sec. 33 T5N R3W G. & S.R.B. & M.

Dear Sir:

The Travelers Indemnity Company issued this bond in 1982 for a well to be drilled designated as "G & L Trust" #1. We have been advised by the principal that this well was never drilled and the bond was never filed in your office.

In order to close our file, we need verification from you that this bond was not filed with you. Therefore, please complete the bottom part of this letter and return to us in the attached envelope.

Thank you for your assistance.

Sincerely yours,
The Travelers Indemnity Company

Carol M Harris

Carol M. Harris, Asst. Underwriter
Surety Department
(415) 945-4174

cmh
encl.

cc: agent & principal

803

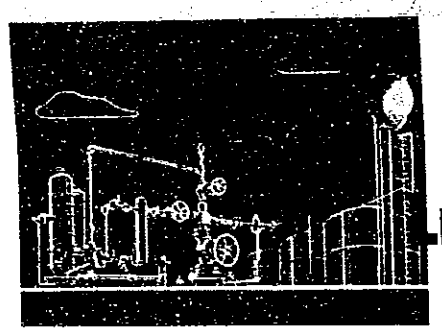
Was this bond filed with your department? No

Remarks The only bond filed by TRI OIL Co. was bond # 402F9798 for well # 78-28 State, located in Sec. 28 - 5N - 3W, G&SRB&M

Signature R. A. Ybarra Date 5-11-83

Title Enforcement Director

WALNUT CREEK OFFICE OF THE TRAVELERS INSURANCE COMPANIES
185 Lennon Lane, P.O. Box 8013, Walnut Creek, California 94596
Home Office: Hartford, Connecticut



LEE W. GIBSON GEOLOGICAL ENGINEER

20511 S. BLYTHE AVE. • RIVERDALE, CALIFORNIA 93656 • PHONE (209) 867-3361

OWNER: LEE GIBSON OIL COMPANY

AKS
RY

April 25, 1982

RECEIVED
APR 26 1982
O & G CONS. COMM.

Oil & Gas Conservation Commission
State of Arizona
1645 West Jefferson, Suite 420
Phoenix, Arizona 85007

Attention: R. A. Ybarra

Gentlemen: Re: Drilling progress
Tri Oil Co. State 78-28
Sec. 28, T.5 N., R.3 W.,
G.& S.R. B.& M.

We spudded in on April 12 and are now 40 feet deep with conductor pipe set at 40 feet. Since setting conductor pipe we have been working continuously on preparations for drilling.

Very truly yours,

Lee W. Gibson

REGISTERED PROFESSIONAL ENGINEER

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 402F9798

That we: TRI-OIL CO.

of the County of FRESNO in the State of CALIFORNIA

as principal, and TRAVELERS INDEMNITY COMPANY

of SAN FRANCISCO

AUTHORIZED TO DO BUSINESS WITHIN THE STATE OF ARIZONA.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of FIVE THOUSAND DOLLARS ---- ($5,000.00)---------- lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

STATE 78-28, Sec. 28., Twp. 5N R 3W, G&S SB&M

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. § 27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission for remedying the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

CANCELLED 3-2-89 DATE

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 8th day of APRIL, 19 82.

TRI-OIL CO.

Principal

WITNESS our hands and seals, this 8th day of APRIL, 19 82.

William R. Lambert

William R. Lambert, Attorney-in-Fact
TRAVELERS INDEMNITY COMPANY

Surety

(Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved
Date 4-13-82

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: R. A. Ytana

Permit No. 803

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Bond
File Two Copies

Form No. 2

State of Arizona
County of Maricopa } ss.

On this 8th day of April, 19 82, before me personally came

William R. Lambert

to me known, who being by me duly sworn, did depose and say: that he is/she is Attorney(s)-in-Fact of The Travelers Indemnity Company, the Corporation described in and which executed the foregoing instrument; that he/she know(s) the seal of said Corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority granted to him/her in accordance with the By-Laws of the said Corporation, and that he/she signed his/her name thereto by like authority.

CANCELLED

Diane G. Moore
(Notary Public)

DATE

My commission expires July 15, 1985

S-498 Rev. 6-79 PRINTED IN U.S.A.

The Travelers Indemnity Company

Hartford, Connecticut

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That THE TRAVELERS INDEMNITY COMPANY, a corporation of the State of Connecticut, does hereby make, constitute and appoint

William R. Lambert of Phoenix, Arizona

its true and lawful Attorney(s)-in-Fact, with full power and authority, for and on behalf of the Company as surety, to execute and deliver and affix the seal of the Company thereto, if a seal is required, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof, as follows:

Any and all bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof

and to bind THE TRAVELERS INDEMNITY COMPANY thereby, and all of the acts of said Attorney(s)-in-Fact, pursuant to these presents, are hereby ratified and confirmed.

This appointment is made under and by authority of the following by-laws of the Company which by-laws are now in full force and effect:

ARTICLE IV, SECTION 14. The Chairman of the Board, the President, the Chairman of the Finance Committee, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Corporate Secretary or any Department Secretary may appoint attorneys-in-fact or agents with power and authority, as defined or limited in their respective powers of attorney, for and on behalf of the Company to execute and deliver, and affix the seal of the Company thereto, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof and any of said officers may remove any such attorney-in-fact or agent and revoke the power and authority given to him.

ARTICLE IV, SECTION 16. Any bond, undertaking, recognizance, consent of surety or written obligation in the nature thereof shall be valid and binding upon the Company when signed by the Chairman of the Board, the President, the Chairman of the Finance Committee, any Executive Vice President, any Senior Vice President, any Vice President or any Second Vice President, and duly attested and sealed, if a seal is required, by the Corporate Secretary or any Department Secretary or any Assistant Corporate Secretary or any Assistant Department Secretary, or shall be valid and binding upon the Company when duly executed and sealed, if a seal is required, by a duly authorized attorney-in-fact or agent, pursuant to and within the limits of the authority granted by his or her power of attorney.

This power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Directors of THE TRAVELERS INDEMNITY COMPANY at a meeting duly called and held on the 30th day of November, 1959:

VOTED: That the signature of any officer authorized by the By-Laws and the Company seal may be affixed by facsimile to any power of attorney or special power of attorney or certification of either given for the execution of any bond, undertaking, recognizance or other written obligation in the nature thereof; such signature and seal, when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

This power of attorney revokes that dated January 12, 1977 on behalf of William R. Lambert of Los Angeles, Califronia

IN WITNESS WHEREOF, THE TRAVELERS INDEMNITY COMPANY has caused these presents to be signed by its proper officer and its corporate seal to be hereunto affixed this 20th day of January 19 81 .

THE TRAVELERS INDEMNITY COMPANY

By

Secretary, Surety

THE TRAVELERS INDEMNITY COMPANY SEAL

S-2242 Rev. 4-78 Printed in U.S.A.

(Over)

State of Connecticut, County of Hartford—ss:

On this 20th day of January in the year 1981 before me personally came D. J. Nash to me known, who, being by me duly sworn, did depose and say: that he resides in the State of Connecticut; that he is Secretary (Surety) of THE TRAVELERS INDEMNITY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of his office under the by-laws of said corporation, and that he signed his name thereto by like authority.

GLORIA D. SEEKINS NOTARY PUBLIC CONNECTICUT

Gloria D. Seekins

Notary Public

My commission expires April 1, 1983

CERTIFICATION

I, Paul D. Tubach, Assistant Secretary (Surety) of THE TRAVELERS INDEMNITY COMPANY, certify that the foregoing power of attorney, the above quoted Sections 14. and 16. of Article IV of the By-Laws and the Resolution of the Board of Directors of November 30, 1959 have not been abridged or revoked and are now in full force and effect.

Signed and Sealed at Hartford, Connecticut, this 8th day of April 19 82 .

THE TRAVELERS INDEMNITY COMPANY SEAL

Paul D. Tubach

Assistant Secretary, Surety

ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual

Tri Oil Company

Post Office Address (Box or Street Address)

20511 S. Blythe Ave., Riverdale, Calif. 93656

Plan of Organization (State whether organization is a corporation, joint stock association, firm or partnership, or individual)

Co- ownership (joint venture) by three business entities with Lee Gibson Oil Company

Purpose of Organization (State type of business in which engaged)

oil and gas exploration and development

If a reorganization, give name and address of previous organization.

If a foreign corporation, give (1) State where incorporated	(2) Name and post office address of state agent	(3) Date of permit to do business in state
	Robert Beckett Arizona Bank Bldg., Suite 2060 101 North 1st Ave.; Phoenix, Arizona	

Principal Officers or Partners (if partnership) NAME	TITLE	POST OFFICE ADDRESS
Lee Gibson Oil Co.: Lee W. Gibson	owner	20511 S. Blythe Ave. Riverdale, Ca. 93656
Quixote Corporation: ~~Phillip Rollhaus~~	president	One East Wacker Drive
Myron Shain	vice-president	Chicago, Illinois 60601
Maricopa Limited Partnership, 1981: Harvey Owen	general partner	663 Owen Ct. Penryn, Calif. 95663

DIRECTORS NAME	POST OFFICE ADDRESS
Quixote Corporation:	
William H. Kemnitz	860 S. River Road West Sacramento, Calif. 95691

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the owner of the Lee Gibson Oil Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Lee W. Gibson
Signature

March 31, 1982
Date

803

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Organization Report
File One Copy
Form No. 1